

JAHRESSTATISTIK
2022



Impressum

Herausgeber: Max-Planck-Institut für extraterrestrische Physik

Redaktion und Layout: T. Herrmann, B. Niebisch



Klimaneutral

Drucken

ClimatePartner.com/11444-2009-1006



Personal 2022

Direktoren

Prof. Dr. R. Bender, Optische und Interpretative Astronomie, gleichzeitig Lehrstuhl für Astronomie/Astrophysik an der Ludwig-Maximilians-Universität München

Prof. Dr. P. Caselli, Zentrum für Astrochemische Studien (Geschäftsführung)

Prof. Dr. R. Genzel, Infrarot- und Submillimeter-Astronomie, gleichzeitig Prof. of Physics, University of California, Berkeley (USA)

Prof. Dr. K. Nandra, Hochenergie-Astrophysik

Prof. Dr. G. Haerendel (emeritiertes wiss. Mitglied)

Prof. Dr. G. Morfill (emeritiertes wiss. Mitglied)

Prof. Dr. J. Trümper (emeritiertes wiss. Mitglied)

Selbstständige Nachwuchsgruppen

Dr. S. Spezzano

Minerva Fast Track

Dr. E. Redaelli

Direktionsassistent

Dr. D. Lutz

Pressesprecherin

Dr. H. Hämmerle

Auswärtige wissenschaftliche Mitglieder

Prof. Dr. E. van Dishoeck, Leiden Observatory (Niederlande), MPE

Prof. Dr. J. Kormendy, Univ. of Texas at Austin (USA)

Prof. Dr. R. Z. Sagdeev, Univ. of Maryland (USA)

Prof. Dr. M. Schmidt †, CALTECH, Pasadena (USA)

Dr. K. Schuster, IRAM, Grenoble (Frankreich)

Prof. Dr. A. Sternberg, Tel Aviv University (Israel)

Kuratorium (gemeinsam mit dem MPI für Astrophysik)

Prof. Dr. A. Bode, Leibniz-Rechenzentrum der Bayerischen Akademie der Wissenschaften, Garching

MdB Dr. A. Christmann, Deutscher Bundestag, Berlin

MdL A. Franke, Bayerischer Landtag, München

MdB F. Hahn, Deutscher Bundestag, Berlin

Prof. Dr. B. Huber, Präsident der Ludwig-Maximilians-Universität, München

Prof. Dr. A. Kayser-Pyzalla, Vorstandsvorsitz Deutsches Zentrum für Luft und Raumfahrt (DLR), Köln

Prof. Dr. D. Kranzlmüller, Direktoriums vorsitzender Leibniz-Rechenzentrum, Garching

Dr. F. Merkle, ehemaliges Vorstandsmitglied OHB System AG, Eching

Dr. U. von Rauchhaupt, Frankfurter Allgemeine Zeitung, Frankfurt/Main

Prof. R. Rodenstock, Rodenstock Geschäftsführungs GmbH, München

Dr. J. Rubner, Vice President Global Communication and Public Engagement, Technische Universität München, München

B. Spiegel, Geschäftsführung Klaus Tschira Stiftung gGmbH, Heidelberg

Dr. M. Weiß, Ressortleiterin Wissen, Süddeutsche Zeitung, München

MDirig Dr. M. Wolter, Abteilungsleiter Bayer. Staatsministerium für Wirtschaft, Energie und Technologie, München

Fachbeirat

Prof. Dr. J. Bland-Hawthorn, University of Sydney, Sydney Institute of Astronomy (Australia)

Prof. Dr. C. Canizares, MIT, Kavli Institute, Cambridge (USA)

Prof. Dr. A. Celotti, SISSA, Trieste (Italien)

Prof. Dr. R. Davies, University of Oxford, Department of Physics (UK)

Prof. Dr. N. Evans, The University of Texas at Austin, Austin (USA)

Prof. Dr. A. Goodman, Harvard-Smithsonian Center for Astrophysics, Cambridge (USA)

Prof. Dr. K. Kuijken, Universiteit Leiden, Leiden (Niederlande)

Prof. Dr. E. Sadler, University of Sydney, Sydney (Australia)

Prof. Dr. R. Sari, The Hebrew University of Jerusalem, Jerusalem (Israel)

Prof. Dr. B. Wilkes, Chandra X-Ray Center, Cambridge (USA)

Fachübergreifende Fachbeiräte

Prof. Dr. C. Cesarsky, Commissariat à l'Énergie Atomique, France, Saclay-Paris (Frankreich)

Prof. Dr. J. Peacock, Universität Edinburgh (UK)

Wissenschaftliche Auszeichnungen, Berufungen

Förster Schreiber, N. M.: ERC Advanced Grant, 2021 competition, European Research Council, Brussels, Belgium, 04/2022.

Eisenhauer, F.: Foreign Associate to the Académie des Sciences, Académie des Sciences Paris, Paris, France, 06/2022.

van Dishoeck, E. F.: Fritz Zwicky Award, European Astronomical Society, Valencia, Spain, 06/2022.

Eisenhauer, F.: Michelson Investigator Achievement Award 2020 for the groundbreaking results of VLTI-GRAVITY, Lowell Observatory and Observatoire de la Côte d'Azur, Montreal, Canada, 07/2022.

Eisenhauer, F.: Jackson-Gwilt Medal of the Royal Astronomical Society for the development of astronomical instrumentation, Royal Astronomical Society, Warwick, United Kingdom, 07/2022.

Correa, C.M.: Carlos Varsavsky Prize - Best PhD Thesis in Astronomy of Argentina, Asociación Argentina de Astronomía, Buenos Aires, Argentina, 08/2022.

Eisenhauer, F.: Gruber Cosmology Prize for designing instruments that collected evidence for a black hole at the center of our galaxy, Gruber Foundation, Busan, Korea, 08/2022.

Eisenhauer, F.: Stern-Gerlach Medal of the German Physical Society for the pioneering work in high-resolution infrared astronomy, DPG, Regensburg, Germany, 09/2022.

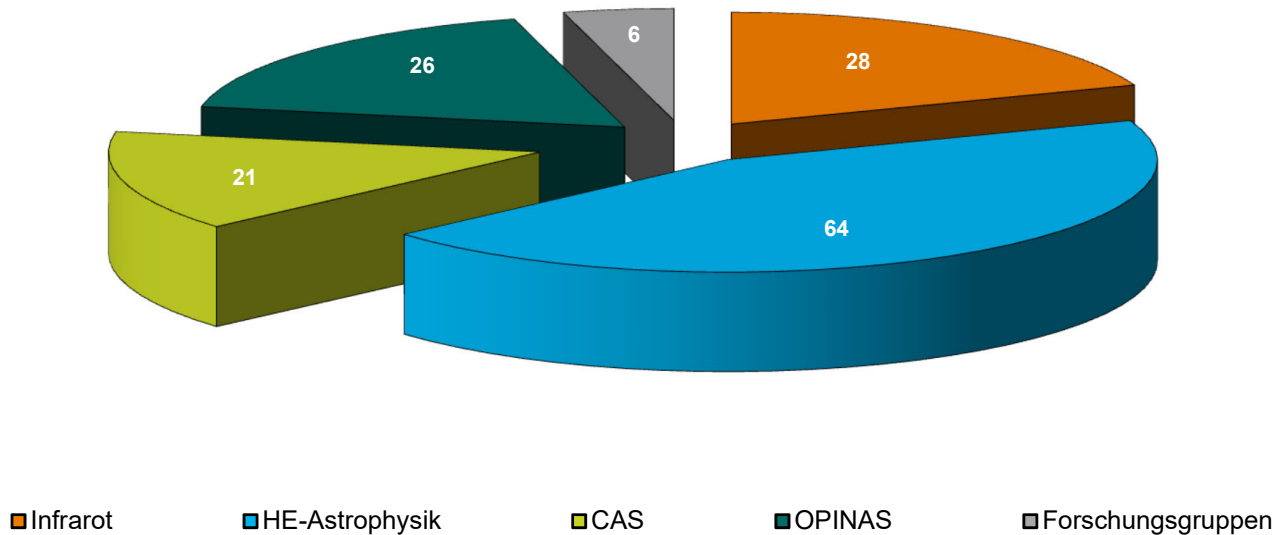
Grassi, T.: Astrophysical Software Award, German Astronomical Society (AG), Bremen, Germany, 09/2022.

van Dishoeck, E. F.: Niels Bohr International Gold Medal, Copenhagen, Denmark, 10/2022.

Shimizu, T.: Reinhard Genzel Nobel Prize Fellowship, Munich, Germany, 12/2022.

Wissenschaftliche Arbeitsgruppen

Mitarbeiter nach wissenschaftlichen Arbeitsgruppen



Infrarot- und Submillimeter-Astronomie

Sekretariat: Richter, A.

Teamassistentinnen: Dengler, S.; Hagedorn, I. (bis 30.09.); Kleiser, A.; Simonis, E. (seit 01.12.); Zanker-Smith, J.

Biondi, Dr. F.; Bourdarot, Dr. G.; Cao, Dr. Y.; Coogan, Dr. R. (bis 28.02.); Dallilar, Dr. Y. (bis 15.09.); Davies, Dr. R.; Eisenhauer, Dr. F.; Feuchtgruber, Dipl.-Phys. H.; Förster Schreiber, Dr. N.; Gillessen, Dr. S.; Jolly, Dr. J.-B. (seit 01.04.); Kravchenko, Dr. K.; Liu, Dr. D.; Lutz, Dr. D.; More, N.; Ott, Dr. T.; Price, Dr. S. (bis 31.07.); Pulsoni, Dr. C. (seit 01.06.); Rabien, Dr. S.; Shangguan, Dr. J.; Shimizu, Dr. T.; Sturm, Dr. E.; Tacconi, Dr. L.; Widmann, Dr. F.; Yazici, S.

Gäste

Grani, Dr. P. (11.-18.02.); Bisbas, Dr. T. (21.-25.03.); Kuhn, L. (22.05.-19.08.); Nestor, A. (03.07.-29.07.); Herrera Camus, Dr. R. (20.07.-19.08.); Harris, Prof. A. (04.7.-08.07.); Cuadra, Dr. J. (4.-15.07., 22.-28.07.); Wuyts, Dr. S. (18.-22.07.); Zhang, J. (18.-22.07.); Netzer, Prof. H. (18.-30.07.); Foschi, A. (16.-20.08.); Wölfer, L. (22.-28.09.); Leemker, Dr. M. (22.-28.09.); Wada, Prof. K. (27.09.-04.10.); Contursi, Dr. A. (bis 25.02.); van Dishoeck, Prof. E.; Finger, Dr. Gert; Amaro Seoane, Dr. Pau; Sternberg, Prof. A.; Tamburo, P.; de Zeeuw, Prof. T.

Doktoranden (D.) / Master (M.)

Barféty, C. (seit 01.09., D., Förster Schreiber); Bettoni, G. (bis 31.12., D., van Dishoeck); Bordoni, M.S. (seit 01.09., D., Genzel/ Gillessen); Drescher, A. (D., Eisenhauer); Lee,

L. Y.-L., (D., Tacconi, Förster-Schreiber); Mang, F. (M., D. seit 01.12., Eisenhauer); Pastras, S. (seit 01.09., D., Genzel/Förster Schreiber); Ribeiro, D. (seit 01.09., D., Genzel/ Gillessen); Santos, D. (D., Shimizu)

Hochenergie-Astrophysik

Sekretariat: Boller, B.

Teamassistentin: Frankenhuizen, W.

Altmann, A.; Andritschke, Dr. R.; Antonelli, V.; Arcodia, R. (bis 31.12.); Becker, Dr. W.; Behrens, Dr. A.; Beitzler, C.; Boller, Prof. Dr. Th.; Bonholzer, M. (bis 31.12.); Brunner, Dr. H.; Buchner, Dr. J.; Bulbul, Dr. E.; Burgess, Dr. M.J.; Burkert, Dr. W.; Burwitz, Dr. V.; Chitham, I. J. (bis 30.06.); Comparat, Dr. J.; Dennerl, Dr. K.; Eder, Dipl.-Ing. J.; Emberger, V.; Frank, J.; Freyberg, Dr. M.; Friedrich, Dr. P.; Friedrich, Dr. S.; Gaida, R.; Gatuzz, Dr. E. (seit 01.09.); Ghirardini, Dr. V.; Gueguen, Dr. A.; Greiner, Dr. J.; Haberl, Dr. F.; Hartner, Dipl. Math. G.; Haase, Dr. J.; Hauser, G.; Keil, Dr. I.; Kienlin von, Dr. A.; Liu, Dr. A.; Laas, Dr. J.; Liu, Dr. T.; Liu, Dr. Z.; Locatelli, N.; Maitra, Dr. Ch.; Malyali, A.; Meidinger, Dr. N.; Mayr, A.; Merloni, Dr. A.; Müller, T.; Müller-Seidlitz, Dr. J.; Ni, Dr. Q. (seit 08.10.); Oser, J. (bis 31.03.); Osterhage, Dr. S.; Pfeffermann, Dipl.-Phys. E. (bis 30.9.); Pietschner, D.; Predehl, Dr. P.; Ramos Ceja, Dr. M.; Rau, Dr. A.; Reiffers, Dr. J.; Rukdee, Dr. S.; Salvato, Dr. M.; Sanders, Dr. J.; Schmidt, T.; Schweingruber, A.; Siegert, T. (seit 01.11.); Stieglitz, V.; Stanke, Dr. Th. (seit 01.08.); Stewart, Dr. I.; Thi, Dr. W.-F.; Trümper, Prof. Dr. J.; Zhang, Dr. X. (seit 1.9.)

Gäste

Acharya, N. (25.03.-30.09.); Acero, Dr. F. (17.-19.10.); Anastasopoulou, Dr. K. (25.-29.07.); Baldini, P. (25.09.-24.12.); Burke, C. (18.-20.9.); Collmar, Dr. W.; Diehl, Dr. R.; Georgakagis, Dr. A. (04.-27.07.); Grünwald, G. (12.-14.01.); Hemmanth, M. (04.-09.07.); Munos Rodriguez, I. (16.04.-30.06.); Musiimenta, B. (16.10.-01.11.); Nicastrò, Dr. L. (15.04.-30.06.); Pfeffermann, E.; Pietsch, W.; Sala, Dr. G. (07.-13.08.); Scheck, D.; Strong, Dr. A.; Schnetler, Dr., H. (12.-15.12.); Schröder Dr. A.; Tohuvavohu, Dr. A. (04.-08.07.); Tomlinson, T. (11.07.-12.09.); Webb, Dr. T. (01.04.-30.06.); Zhang, Dr. H. (21.07.-27.07.)

Doktoranden (D.) / Master (M.)

Aydar, C. (seit 01.09., D., Merloni); Bacelj, A. (seit 01.10., D., Greiner); Bahar, E. (D., Bulbul); Biltzinger, B. (D., Greiner); Bock, K. (seit 01.12., M. Greiner); Bogensberger, D. (bis 30.06., D., Nandra); Camilloni, F. (D., Becker); Fresco, A. (D., Merloni); Gauger, I. (seit 01.09., D., Buchner); Groto-va, I. (seit 25.07., D., A. Rau); Hecker, Y. (M., Greiner); Hecker, C. (seit 01.05., M. Greiner); Kaltenberger, D. (D., Haberl); Khrokriakova, A. (seit 25.07., D., Becker); Igo, Z. (D., Merloni); Kuhn, M. (M., Greiner); Lopez, N. (bis 30.09., M., Buchner); Mayer, M. (D., Becker); Roster, W. (seit 01.10., D., Salvato); Scheck, D. (bis 30.09., M., Sanders); Schmidt, L. (M., Greiner); Shreeram, S., (D., Bulbul); Seppi, R. (D., Comparat); Schösser, E. (bis 31.11., M., Greiner); Waddell, S. (D., Nandra, Boller); Willer, R. (D., Greiner); Wolf, J. (D., Salvato); Yeung, H.F., (D., Becker); Zhang, Y., (D. Ponti); Zheng, X. (D. Ponti)

Optische und Interpretative Astronomie

Sekretariat: Ingram, C.

Bodendorf, Dr. C.; Bohnet, Dipl. Phys. A.; Clarke, Dr. J. (seit 01.08.); Correa, Dr. C. (seit 07.09.); DeNicola, Dr. S. (seit 01.12.); Escartin, Dr. J.; Fabricius, Dr. M.; Farrow, Dr. M. (bis 31.12.); Gracia Carpio, Dr. J.; Grupp, Dr. F.; Haase, J. (seit 01.04.); Hou, Dr. J. (seit 01.06.); Hopp, Dr. U.; Kluge, Dr. M.; Kruk, Dr. S.; Lippich, Dr. M. (bis 31.03.); Paech, Dr. K.; Parikh, Dr. T.; Pezzotta, Dr. A.; Pulsoni, Dr. C. (bis 31.03.); Raison, Dr. F.; Saglia, PD. Dr. R.; Sanchez, Dr. A.; Snigula, Dr. J.; Steinwagner, Dr. J.; Subramanian, Dr. S.; Thomas, Dr. J.; Weller, Prof. Dr. J.; Wetzstein, Dr. M.; Wylie, Dr. S. (seit 01.08.)

Doktoranden (D.) / Master (M.)

Balzer, F. (D., Saglia); Bolze, R. (M., Bender); Blumhof, M. (M., Bender); Clarke (bis 31.07., D., Gerhard); DeNicola, S. (bis 30.11., D., Saglia); Esposito, M. (D., Saglia); Fiorilli, A. (seit 01.09., D., Saglia) Finkbeiner, L. (M., Fabricius); Gong, L. (D., Bender); Ding, H. (M., Fabricius); Koc, A. (M., Saglia); Kreckler, K. (bis 30.04., D., Fabricius); Lipka, M. (D., Saglia); Luis, T. (D., Saglia); Merghan, K. (D., Bender); Neureither B. (D., Thomas); Pandey, A. (D., Gerhard); Seminaite, A. (D., Sanchez); Smolla, M. (D., Bender); Steuer, J. (D., Grupp); Thikonenko, I. (D., Saglia); Wessely, P. (M., Fabricius); Wylie, S. (bis 31.07., D., Gerhard)

Gäste

Ruiz, Dr. A. (01.07.-30.09.); Hill, Prof. Dr. G. (01.08.-30.09.)

Zentrum für astrochemische Studien

Sekretariat: Langer, A.

Almeida Ribeiro, Dr. F. (seit 01.09.); Araki, Dr. M. (seit 01.04.); Bunn, Dr. H. (seit 11.07.); de Oliveira Alves, Dr. F. (bis 30.11.); Endres, Dr. Ch.; Giuliano, Dr. B.M.; Gong, Dr. M.; Hsieh, Dr. T.-H.; Ivlev, Dr. A.; Jensen, Dr. S.; Jiménez Redondo, Dr. M.; Jusko, Dr. P.; Küffmeier, Dr. M.; Lattanzi, Dr. V.; Lin, Dr. Y.; Maureira Pinochet, Dr. M.J.; Nolan, Dr. Ch. (bis 31.05.); Pineda Fornerod, Dr. J.; Redaelli, Dr. E.; Schmiedeke Dr. A. (bis 10.04.); Silsbee, Dr. K. (bis 20.11.); Sipilä, Dr. O.; Spezzano, Dr. S.

Gäste

Akimkin, Dr. V. (seit 07.12.); Billard, B. (28.02.-28.06.); Cherouvrier, D. (21.03.-03.04, 16.05.-27.05.); Collmar, Dr. W. (seit 01.01.); Das, Dr. A. (seit 01.12.); Dohnal, P. (27.06.-10.10.); Eschen, Y., (04.07.-31.12.); Ferreira, T. (16.06.-04.07.); Gärtner, L. (seit 01.01.-31.12.); Gehmen, T. (16.08.-28.10.); Gupta, T. (01.01.-31.05., 01.07.-31.12.); Harju, Dr. J. (01.02.-30.04.); Hsieh, Ch.-H. (21.11.-03.12.); Rab, Dr. Ch. (seit 06.08.); Santos, P. (16.06.-04.07.); Silsbee, Dr. K. (12.12.-31.12.); Taniguchi, K. (09.01.-18.03.); Weber, M. (01.12.-31.12.)

Doktoranden (D.) / Master (M.)

Alberton, D. (D., Caselli); Choudhury, S. (bis 18.10., D., Caselli, Pineda Fornerod); Ferrada Chamorro, S., (seit 04.08., D., Caselli); Ferrer Asensio, J., (D., Caselli, Spezzano); Giers, K. (D., Caselli, Spezzano); Kakkenpara Suresh, S. (seit 20.05., D., Caselli); Kruczkiewicz, F. (bis 31.12., D., Caselli); Müller, B. (bis 31.03., D., Caselli, Giuliano); Obolentseva, M. (seit 22.06., D., Caselli, Ivlev); Riedel, W. (D., Caselli, Redaelli); Tabatabaei Mazraeh No, F.S. (D., Caselli, Redaelli); Valdivia Mena, M. T. (D., Caselli, Pineda Fornerod); Zamponi Fuentealba, J. (D., Caselli, Maureira Pinochet)

Working GroupsWorking Group Gerhard

Gerhard, Dr. O.

PhD Student: Pandey, A.

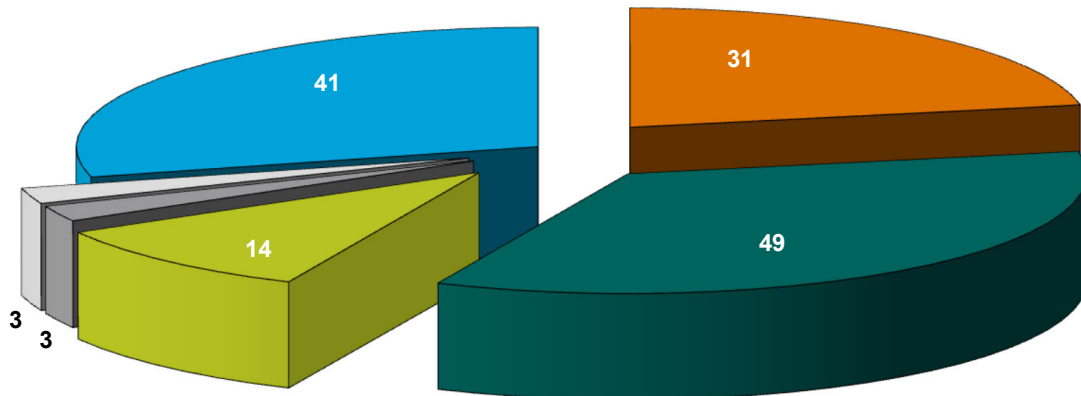
Working Group van Dishoeck

van Dishoeck, Prof. Dr. E.; Hu, Dr. C.-Y. (bis 01.09.); Grant, Dr. S.

PhD Student: Bettoni, G.

Ingenieurbereich und Werkstätten

Ingenieurbereich, Werkstätten und Zentrale Bereiche



■ Elektronik
 ■ Mechanik
 ■ Zentrale DV-Gruppe
 ■ Öffentlichkeitsarbeit
 ■ Bibliothek
 ■ Verwaltung

Elektronische Entwicklung

Albrecht, Dipl.-Ing. S. (Leitung)

Barl, Dipl.-Ing. (FH) L.; Bechteler, Dr. T.; Bornemann, Dipl.-Ing. (FH) W.; Burghardt, Dipl.-Ing. (FH) T.; Dickfeld, M.Sc. (FH) F. (seit 01.08); Hälker, Dipl.-Ing. (FH) O.; Hans, O.; Hartmann, K.; Jilg, Dipl.-Ing. (FH) T. (seit 15.11.); Jung, M.Sc. F.; Kink, Dipl.-Ing. (FH) W.; Kshirsagar, M.Sc. T.; Mandla, M.Sc. C.; Müller, Dipl.-Ing. (FH) S.; Neumeier, M.Sc. L.; Rau, M.Sc. C.; Reiffers, Dipl.-Ing. (FH) J.; Uysal, M.Sc. S.; Yaroshenko, V.; Zanker-Smith, J.; Ziegleder, Dipl.-Ing. (FH) J.

Elektronische Werkstatt und Haustechnik

Oberauer, F. (Leitung)

Bachhuber, M.; Berger A.; Cibooglu, H.; Emslander, A. (bis 09.09.); Greßmann, R.; Kreibich, I.; Langer, P.; Özdemir, H.; Rupprecht, T. (bis 31.05.) Schneider R.

Doktoranden (D.) / Master (M.)

keine

Mechanik und Testlabor

Schubert, Dr. J. (bis 31.05.); Lang, Dipl.-Phys. F. (Leitung) (seit 01.05.)

Antonelli, Dr.-Ing. V.; Beitler, M. Eng. C. (bis 31.05.); Deysenroth, C.; Deysenroth, M.; Dittrich, Dipl.-Ing. (FH) K.; Emslander, B. Eng. A.; Geis, Dr. N.; Gemperlein, Dipl.-Phys. H. (bis 30.06.); Hartl, Dr. M.; Haußmann, F.; Hörmann, M.Sc. V. (bis 31.03.); Huber, Dipl.-Ing. H.; Mican, Dipl.-Ing. B.; Möller, M. Eng. J.-P.; Paßlack, Dipl.-Ing. (FH) S.; Pflüger, Dipl.-Ing. (FH) A.; Pietschner, Dipl.-Ing. (FH) D.; Rohe, C.; Sönmez, M. Sc. A. (seit 01.07.); Strecker, R.; Frank, M.Sc. J. (seit 15.10.); Senol Dipl.-Phy. Y. (seit 01.07.)

Mechanische Werkstatt

Czempiel, S. (Leitung)

Bayer, R.; Bergner, K.; Brara, A.; Budau, B. (bis 31.12.); Eibl, J.; Feldmeier, P.; Folek L.; Furchtsam, C.; Goldbrunner, A.; Hartwig, J.; Heckmair, S. (seit 16.2.); Honsberg, M.; Huber, D.; Huber, F.-X. (bis 31.07.); Kestler, H.-J.; Knapp, S.; Loichinger, L. (seit 16.2.); Sandmair, R.; Schunn, W.; Schuppe, D.; Soller, F.; Waldhör, F.

Auszubildende

Beck, A.; Fokken M. (seit 01.09.); Furchtsam, S.; Heckmair, S. (bis 15.02.); Lindenmüller, C.; Loichinger, L. (bis 15.02.) Schaefer, T.; Stadler, B.; Stübing, M.; Weber ,G. (seit 01.09.)

Werkstudenten und Praktikanten

Studentische Arbeiten/Werkstudenten

Möller, J.; Ovsiannikova, A.; Saxena, A.; Starck, H.; Tiwari, S.R.

Schülerpraktikum

Brunn, L.; Centmeyer, M.; Du, H.; Eschen, Y.; Groß, J.; Harms, N.; Hoßfeld, T.; Maurus, J.; Schmied, A.; Scholz, M.; Schregle, T.; Vollmar, M.

Hochschulpraktikum

Rosin, E.; Shivakumar, J.; Spallek, L.; Tomlinson, T.J.

Zentrale Bereiche

Zentrale IT-Gruppe

Bohnet, Dipl. Phys. A. (Leitung)
 Agudo Berbel, A.; Baumgartner, H.; Grassi, Dr. T.; Kleiser, A.; Klose, L.; Kollmer, C.; Oberauer, A.; Ott, Dr. T.; Piemonte, A.; Elsner, C.; Snigula, Dr. J.; Wieprecht, Dipl.-Ing. E.; Wierzorrek, Dipl.-Ing. (FH) E.

Öffentlichkeitsarbeit

Hämmerle, Dr. H.; (Leitung)
 Herrmann, T.; Niebisch, B.

Bibliothek

Bartels, C. (Leitung)
 Blank, E., Balicevic, M.

IMPRS

Hilbert, A.

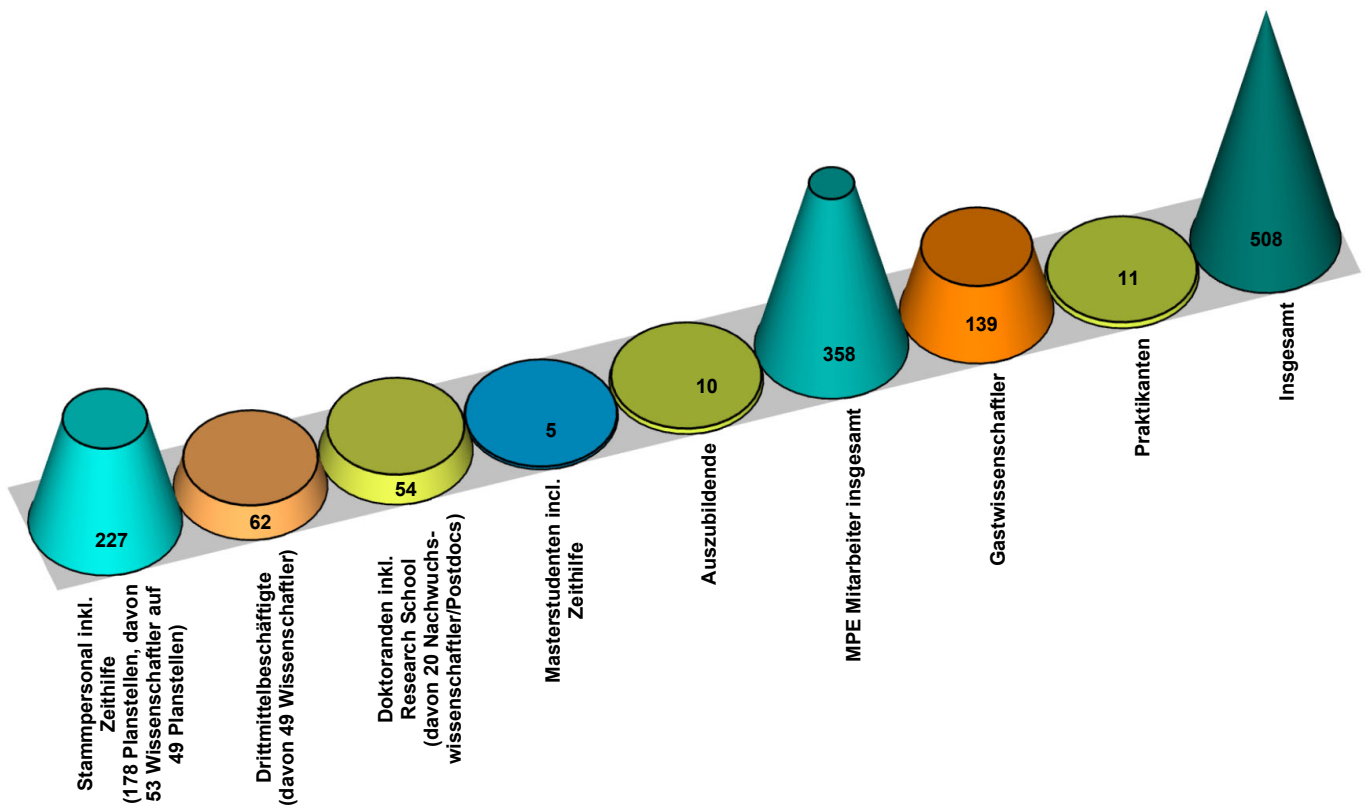
Verwaltung

Fischhaber, P. (seit 01.03.) (Leitung VAD); Wanger, H. (bis 31.05.)

Sekretariat: Hesseler, G.

Arturo, A.; Ayari, S.; Bauer, T.; Cziasto, U.; Eder, A. (bis 31.07.); Eicher, C.; Faust, T.; Gareva, L.; Goldbrunner, S.; Grohmann, M.; Hartung, I.; Hausmann, S.; Hidas, R.; Jäkel, T.; Jirsch, Y.; Kaps, S.; Keil, M.; Kestler, L.; Krapivina, A.; Kuhwald, E.; Maier, E.; Mandl, E.; Nagy, A.; Neun, A. (BR); Paschou, J.; Preisler, C.; Rosenberger, S.; Sacher, A.; Schmidt, A.; Schwaiger, S.; Seyfarth, B.; Stock, C.; Stöckl, D.; Stricker, C.; Studier, S.; Thiess, F.; Thiess, L.; Üblacker, K. (bis 31.10.); Zubanova, E.

Personalstatistik

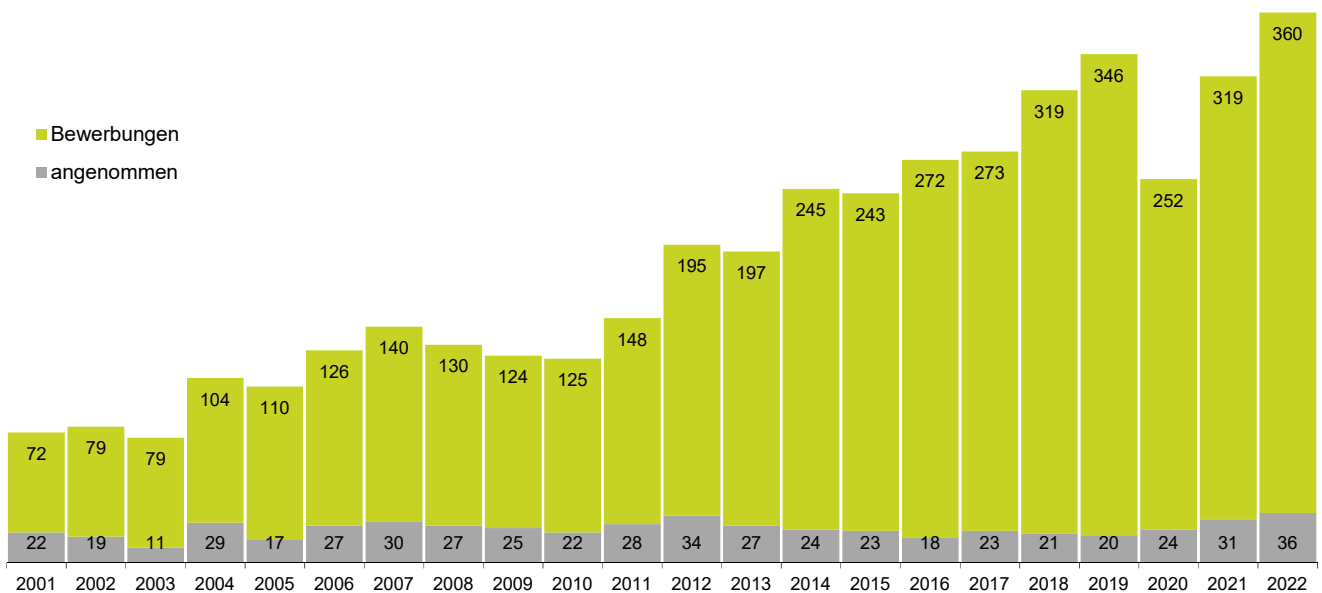


Internationale Max-Planck Research School (IMPRS) für Astrophysik

Die IMPRS für Astrophysik ist eine Graduiertenschule an der Ludwig-Maximilians-Universität (LMU) München. Sie ist ein gemeinsames Projekt der beiden Max-Planck-Institute MPE und MPA (Max-Planck-Institut für Astrophysik) sowie der Sternwarte der LMU München und der Europäischen Südsternwarte ESO. Im akademischen Jahr 2022 nahmen insgesamt 114 Studenten an dem Programm

teil, davon 47 am MPE. Für das Studienjahr 2022 haben sich 360 Studenten aus insgesamt 42 Ländern beworben. Davon wurden 36 Studenten angenommen, davon 14 am MPE. Aus den lokalen Universitäten kommen in der Regel übers Jahr weitere Doktoranden zum IMPRS Programm dazu, sodass man auf eine durchschnittliche Teilnehmerzahl von 26 Doktoranden pro Jahr kommt.

IMPRS Bewerbungen seit 2001



Jährliche Bewerbungen für das IMPRS Programm in Garching. Seit dem Start haben sich bis zum Studienjahr 2022 insgesamt 4258 Studenten beworben, 538 davon wurden angenommen.

Öffentlichkeitsarbeit

Das MPE engagierte sich 2022 durch folgende Aktivitäten in der Öffentlichkeitsarbeit: 35, zum Teil online gehaltene populär-wissenschaftliche Vorträge durch Wissenschaftler, sowie 19 Pressemitteilungen über wissenschaftliche Ergebnisse und allgemeine Nachrichten (wissenschaftliche Preise, Auszeichnungen). Nachdem die Aktivitäten am Institut aufgrund der Covid19-Pandemie in den vergangenen zwei Jahren fast vollständig zum Erliegen kamen, waren im Laufe des Jahres wieder vereinzelte Besuche und Events möglich. Insgesamt wurden 2022 am MPE sechs Besuchergruppen empfangen, darunter eine Delegation des designierten Präsidenten der Max-Planck-Gesellschaft, Patrick Cramer.

Der Girlsday 2022 wurde online abgehalten und bestand aus mehreren Vorträgen sowie einem Livestream aus der Werkstatt. Insgesamt nahmen 50 Schülerinnen teil.

Auch in 2022 wurden die Aktivitäten auf Social Media fortgeführt bzw. intensiviert. Der Twitteraccount des MPE (@MPE_Garching) wies zum Stichtag 31.12.2022 1276 Follower auf und setzte seit der Aktivierung im Juni 2021 insgesamt 623 Tweets bzw. Re-Tweets ab. Der Account auf LinkedIn (MPE-Garching) wies zum Ende des Jahres 3806 Follower auf, womit die Followerzahl innerhalb eines Jahres mehr als verdoppelt wurde. Zusätzlich wurde im Dezember 2022 noch ein Account auf Mastodon (@MPE_Garching) angelegt.

Weitere Informationen zur Öffentlichkeitsarbeit sind unter:

<http://www.mpe.mpg.de>

zu finden.

Projekt-Gruppen

(Projektleiter unterstrichen)

Infrarot- und Submillimeter-Astronomie

Stellvertreter des Gruppendirektors:

Lutz, Tacconi.

ERIS:

Dallilar, R. Davies, Dengler, M. Deysenroth, Eisenhauer, Feuchtgruber, Gemperlein, Hans, Hartl, Hartwig, D. Huber, Kleiser, Kravchenko, Pflüger, C. Rau, Sturm, Wiezorrek.

GRAVITY, GRAVITY+:

Bourdardot, de Zeeuw, Dengler, Drescher, Eisenhauer, Feuchtgruber, Genzel, Gillessen, Hartl, Haußmann, Lutz, Mang, More, T. Ott, Pflüger, C. Rau, Ribeiro, Sadun Bordoni, Santos, Schubert, Shangguan, Shimizu, Sturm, Tacconi, Uysal, Widmann, Wieprecht, Wiezorrek, Yazici, Zanker-Smith.

LBT Argos:

Barl, R.Davies, M. Deysenroth, Gemperlein, Rabien, Zanker-Smith, Ziegleder.

MICADO:

Barl, Biondi, Cao, R. Davies, Dengler, M. Deysenroth, J. Eder, Eisenhauer, A. Emslander, Förster Schreiber, Geis, Gemperlein, Genzel, Gillessen, Hartl, Haußmann, H. Huber, Jilg, Kleiser, Kravchenko, Lang, Neumeier, Pflüger, Rabien, Sönmez, Sturm, Ziegleder.

Galactic Center:

Bourdardot, Dallilar, Drescher, Eisenhauer, Genzel, Gillessen, Mang, T. Ott, Ribeiro, Sadun Bordoni, Widmann, de Zeeuw.

Galactic Nuclei:

Cao, R. Davies, Genzel, Lutz, Shangguan, Santos, Shimizu, Sturm, Tacconi, de Zeeuw.

Galaxies at High Redshift:

Barféty, Cao, Coogan, Förster Schreiber, Genzel, Jolly, L. Lee, D. Liu, Lutz, Pastras, Pulsoni, Price, Sturm, Tacconi.

Star Formation:

Bettoni, Grant, Hu, van Dishoeck.

Hochenergie-Astrophysik

ATHENA/Mirror:

Budau, Burwitz, Hartner, Langmeier, Müller, Passlack, Rukdee, Schmidt, .

ATHENA/WFI:

Albrecht, Andritschke, Antonelli, Bechteler, Behrens, Bonholzer, Bornemann, Eder, Emberger, Frank, Freyberg, Haberl, Hälker, Hartmann, Hauser, Kink, Lederhuber, Meidinger, Mican, Möller, Müller-Seidlitz, Nandra, Pietschner, A. Rau, Reiffers, Schubert, Strecker, v. Kienlin, Pflüger.

Chandra:

Burwitz, Predehl.

Einstein Probe/Detector:

Keil, Meidinger, Nandra.

Einstein Probe/Mirror:

Budau, Burwitz, Eder, Friedrich, Gaida, Hartmann, Hartner, Langmeier, Z. Liu, Müller, Passlack, Pfeffermann, Rohe, Rukdee, Schmidt, Schuppe, Stieglitz.

eROSITA:

Andritschke, Becker, Boller, Bornemann, , Brunner, Budau, Burghardt, Bulbul, Burwitz, Coutinho, Dennerl, Dittrich, Eder, Eibl, Emberger, Freyberg, P. Friedrich, S. Friedrich, Gaida, Goldbrunner, Gueguen, Haberl, Hälker, Hartmann, Hartner, F. Huber, Kink, Maitra, Meidinger, Merloni, Mican, S. Müller, Nandra, Ni, F. Oberauer, Pfeffermann, Pietschner, Predehl, Ramos-Ceja, Rau, Reiffers, Rohé, Salvato, Schuppe, Soller, Stewart, Trümper, v. Kienlin.

ROSAT:

Boller, Freyberg, Haberl, Trümper.

Swift:

Greiner.

XMM-Newton:

Boller, Dennerl, Freyberg, Haberl, Meidinger, Trümper.

Fermi:

Collmar, Diehl, Greiner, v. Kienlin.

GROND:

A. Rau.

INTEGRAL:

Diehl, Greiner, v. Kienlin.

MXT-SVOM:

Budau, Burwitz, Hartner, Langmaier, Müller, Passlack, Meidinger, Nandra, Rukdee, Schmidt, A. Rau.

eXTP:

Altmann, Bechteler, Meidinger, Nandra.

4MOST:

Comparat, Laas, Merloni, Salvato, Thi.

Active Galaxies:

Boller, Buchner, Collmar, Comparat, T. Liu, Merloni, Nandra, Ni, Salvato.

Clusters of Galaxies:

Artis, Buchner, Bulbul, Comparat, Garrell, Gatuazz, Ghiradini, Kluge, A. Liu, Locatelli, Ramos-Ceja, Sanders

eBOSS/SPIDERS:

Comparat, Merloni, Nandra, Salvato.

Optische und Interpretative Astronomie**Large Scale Structure, eBoss, HETDEX:**

Bender, Correa, Farrow, Fabricius, Hopp, Pezzotta, Sanchez.

EUCLID:

Bender, Bodendorf, Escartin, Fabricius, Garcia Carpio, Grupp, Kruk, Hartung, Raison, Saglia, Sanchez, Steinwagner, Wetzstein.

Galaxy Dynamics:

Bender, Gerhard, Parikh, Saglia, Thomas.

INODE:

Bender, Fabricius, Subramanian.

GRAVITY+:

Bender, Fabricius

KMOS:

Bender, Saglia.

MICADO:

Bender, Fabricius, Grupp, Saglia, Thomas.

Prime Focus Spectrograph:

Bender, Fabricius, Garcia Carpio, Sanchez.

Stellar Populations and Galaxy Formation:

Bender, Hopp, Parikh, Saglia.

Zentrum für astrochemische Studien**Observations:**

De Oliveira Alves, Hsieh, Jensen, Lin, Maureira Pinochet, Pineda Fornerod, Redaelli, Schmiedeke, Segura-Cox, Spezzano.

Theory:

Gong, Grassi, Ivlev, Küffmeier, Nolan, Rab, Silsbee, Sipilä.

Laboratory:

Dickfeld, Endres, Giuliano, Hans, Jiménez Redondo, Jusko, Kshirsagar, Lattanzi, Spezzano.

Lehrveranstaltungen / Seminare

Johann Wolfgang Goethe University (Frankfurt am Main, Germany)

Boller, Th.

Radiation and Matter. (SS 22).

Dynamik des Planetensystems. (SS 22).

AGN Physics. (WS 22/23).

Chalmers University of Technology (Gothenburg, Sweden)

Caselli, P.

Introduction to Astrochemistry. (online lecture May 2022)

Heidelberg University (Heidelberg, Germany)

Caselli, P.

Astrochemistry 101: from atoms to seeds of life. (Heidelberg Summer School).

Astrochemistry 101: Molecules as diagnostics of stars and planet formation. (Heidelberg Summer School).

University of Groningen (Groningen, The Netherlands)

Caselli, P.

From atoms to seeds of life: the astrochemical journey. (Blaauw Lecture).

Pontificia Universidad Católica de Chile (Santiago, Chile)

Caselli, P.

Dense Core Chemistry. (Astrochemistry Summer School).

Protostellar disk chemistry. (Astrochemical Summer School).

Planet formation and chemistry. (Astrochemistry Summer School).

TUM (Garching, Germany)

Eisenhauer, F.

High Angular Resolution Astronomy: Telescopes, Adaptive Optics, Interferometry, and more. (SS 22).

Introduction to Astrophysics. (WS 22/23).

Bad Honnef Physics School (Bad Honnef, Germany)

Gillessen, S.

The Black Hole in the Galactic Center. (WS 22/23).

Universidad Autónoma de Chile (Santiago, Chile)

Lattanzi, V.

Molecular Spectroscopy for Astrochemistry: Part 1 - Context and Theory. (November 2022).

Molecular Spectroscopy for Astrochemistry: Part 2 - From Theory to Lab to Space. (November 2022).

Universidad Andres Bello in Chile (Santiago, Chile)

Salvato, M.

The problem of identification and characterisation of X-ray sources in AGN evolutionary studies. (WS 22/23).

Observatorio Nacional Rio de Janeiro (Rio de Janeiro, Brazil)

Salvato, M.

eROSITA insights on the hot and energetic Universe. (Special Courses Cycle 2022,).

Organisation von wissenschaftlichen Seminaren / Konferenzen

Users Meeting of Cavity Spectroscopy. zoom, 15.12.2022, Organisation: M. Araki, K. Tsukiyama, T. Oyama, K. Suma.

Galaxy Clusters 2022: Challenging Our Cosmological Perspectives. Baltimore, 25-29 April 2022, Organisation: E. Bulbul, M. Donahue, Y.-T. Lin, T. Marriage, M. Montes, P. Natarajan, M. Ntampaka, M. Postman.

Multi-phase, Multi-temperature and Complex: how AGN feedback shapes the nature of the circum-galactic and halo gas in galaxy groups. Garching, December 6-9, 2022, Organisation: P. Popesso (chair), V. Mainieri, M. Brusa, C.

Peroux, A. Concas, E. Bulbul, A. Merloni, J. Comparat, D. Nelson, K. Dolag, P. Tozzi, S. Ettori, S. Borgani, P. Rosati, A. Liu, V. Ghirardini.

Friends of Friends Meeting. Córdoba / Argentina, 18.04. - 22.04.2022, Organisation: V. Bertazzi, R. Pignata, V. Cristiani, L. Ferrero, F. Stasyszyn, E. Díaz-Giménez, V. Daza, S. Gurovich, A. Rodríguez, D. Mast, C. Correa.

The Epoch of Galaxy Quenching. Cambridge, United Kingdom, 05.09. - 09.09.2022, Organisation: D. Sijacki, F. D'Eugenio, A. Bluck, M. Cappellari, A. Concas, E. Cur-

tis-Lake, S. Eales, S. Ellison, N. M. Förster Schreiber, J. Hlavacek-Larrondo, R. Maiolino, Y. Peng, A. Pillepich, J. Schaye, J. Scholtz.

Alvio@80 – Of Stars and Galaxies: Open Routes and Future Horizons Charted by a Curious Venetian Explorer. Chania, Crete, Greece, 09.09. - 10.09.2022, Organisation: M. Giavalisco, N. Arimoto, T. Brown, V. Charmandaris, A. Cimatti, E. Daddi, E. d'Onghia, N. M. Förster Schreiber, L. Hunt, T. Kodama, G. Magdis, C. Maraston, S. Mei, B. Poggianti, R. M. Rich, G. Rodighiero, J. Silverman, M. Zoccali.

In Situ View of Galaxy Formation 2. Ringberg, Germany, 25.07. - 29.07.2022, Organisation: N. M. Förster Schreiber, L. J. Tacconi, R. Genzel, D. Lutz, J. Bland-Hawthorn, R. Bouwens, F. Combes, T. de Zeeuw, T. Kodama, T. Naab, A. Renzini, A. Shapley, A. M. Swinbank, T. Treu.

Multi-phase, Multi-temperature and Complex: how AGN feedback shapes the nature of the circum-galactic and halo gas in galaxy groups. ESO, Garching, Germany, 7.12-9.12, Organisation: P. Popesso (chair), V. Mainieri, M. Brusa, C. Peroux, A. Concas, E. Bulbul, J. Comparat, D. Nelson, K. Dolag, P. Tozzi, S. Etori, S. Borgani, P. Rosati, A. Liu, V. Ghirardini.

European Planetary Science Congress 2022: Small bodies from the active Main Belt to the Oort cloud and beyond. Granada, Spain, 18.09. - 23.09.2022, Organisation: J.-B. Vincent, T. Müller, X. Shi.

The Dynamic & Chemical Connection. Leiden, 04.07. - 08.07.2022, Organisation: Ch. Rab, Ch. Ginski, C. Hall, T. Grassi, J. Ilee.

EAS2022 - Symposium S5: Towards the next generation of X-ray surveys with Athena. Valencia, Spain, 30/06 - 01/07/2022, Organisation: A. Comastri, S. Etori (co-Chair), M. Guainazzi (co-Chair), A. Hornschemeier, L. Lovisari (co-Chair), S. Martínez-Núñez, K. Nandra, L. Piro, E. Pointecouteau, A. Rau (Co-Chair), M. Salvato, T. Reiprich, M. Sasaki.

Observing the Universe in Motion: 5 Years of GRAVITY. Schloss Ringberg, Germany, 23.10. - 29.10.2022, Organisation: P. Caselli, V. Cardoso, F. Eisenhauer (co-chair), S. Hönig, L. Kreidberg, A. Lagrange, D. Lutz (co-chair), J. Monnier, G. Perrin, K. Perraut, T. Shimizu (co-chair), J. Woillez.

LyX Day (MPA). MPA, 05.10.2022, Organisation: E. Komatsu, F. Arrigoni Battaia, B. Ciardi, M. Gronke, M. Fabricius, C. Peroux, M. Walther.

OPINAS seminar (weekly seminar). MPE, 26.09.2022 - 12.12.2022, Organisation: A. Pezzotta, S. Kruk.

Multi-line Diagnostics of the Interstellar Medium. Nice, France, 04.04 - 06.04.2022, Organisation: C. Ceccarelli, J. Cernicharo, S. García-Burillo, M. Gérin, S. Guilloteau, F. Le Petit, R. Neri, N. Sakai, E. Schinnerer, K. Schuster, L. Tacconi, A. Weiss.

Galaxy evolution with the ESA Euclid mission and ESO telescopes. European Space Astronomy Centre (ESAC), Villanueva de la Cañada near Madrid, Spain, 24.10. - 27.10.2022, Organisation: J.-G. Cuby (co-chair)

, K. Kuijken (co-chair), C. Scarlata (co-chair), S. Toft (co-chair), B. Altieri, R. Bowler, J. Brinchmann, K. Caputi, J.-C. Cuillandre, C. Conselice, C. De Breuck, P. Ferruit, G. Guzzo, R. Ivison, L. Koopmans, R. Laureijs, V. Mainieri, R. Pello, L. Tacconi.

A Holistic View of Stellar Feedback and Galaxy Evolution. Ascona, Switzerland, 11.07. - 15.07.2022, Organisation: A. McLeod (chair), D. Kruijssen, M. Krumholz, L. Tacconi.

Ringberg Colloquium in Honor of Reinhard Genzel's 70th Birthday. Schloss Ringberg, Germany, 26.06 - 02.07.2022, Organisation: L. Tacconi, F. Eisenhauer, N. Förster Schreiber, D. Lutz, E. Sturm.

In Situ View of Galaxy Formation 2. Schloss Ringberg, Germany, 24.07. - 29.07.2022, Organisation: N. M. Förster Schreiber (co-chair), L. J. Tacconi (co-chair), R. Genzel, D. Lutz, J. Bland-Hawthorn, R. Bouwens, F. Combes, T. de Zeeuw, T. Kodama, T. Naab, A. Renzini, A. Shapley, M. Swinbank, T. Treu.

44th COSPAR Scientific Assembly, COSPAR-22-F3.1, Chemical Complexity of Molecular Universe. Athens, Greece, 16.07-24.07.2022, Organisation: L. Bizzocchi, P. Caselli, A. Das, N. Mason, C. Puzzarini, V.M. Rivilla, T. Shimonishi, B. Sivaraman.

44th COSPAR Scientific Assembly, COSPAR-22-B1.3, Astrochemistry and Composition as Adriane's Threads for Planet Formation. Athens, Greece, 16.07-24.07.2022, Organisation: P. Caselli, M. Drozdovskaya, S. L. Ivanovski, D. Stamatellos, N. Turner, D. Turrini, S. Werner, K. Zhang.

EPoS 2022 - The Early Phases of Star Formation - Insights from Dynamics. Ringberg, Germany, 24.04-29.04.2022, Organisation: A. Bacmann, P. Caselli, J. Di Francesco, R. Friesen, A. Hacar, Th. Henning, J. Kainulainen, S.-P. Lai, S. Offner, P. Schilke, J. Steinacker, A. Sternberg.

EAS2022 - European Astronomical Society Annual Meeting. Valencia, Spain, 27.06-01.07.2022, Organisation: N. Aghanim, J. Brinchmann, P. Caselli, F. Figueras, J. Fynbo, D. Gabuzda, J.C. Guirado, L. Kaper, E. Khomenko, J. Knapen, Á. Labiano, L. Lara, S. Lucatello, G. Mellema, G. Meynet, D.F. Mota, B. Namumba, H. Rauer, N. Rea, J. Read, A. Różańska, J. Schaye, R. Szabo.

The astrochemical heritage: from molecular clouds to planetary surfaces. Valencia, Spain, 30.06-01.07.2022, Organisation: A. Belloche, P. Caselli, C. Puzzarini, V.M. Rivilla, S. Viti, C. Walsh.

GRAVITY - Observing the Universe in Motion: 5 Years of GRAVITY. Ringberg, Germany, 23.10-28.10.2022, Organisation: V. Cardoso, P. Caselli, F. Eisenhauer, S. Hoenig, L. Kreidberg, A.-M. Lagrange, D. Lutz, J. Monnier, K. Perraut, G. Perrin, T. Shimizu, J. Woillez.

Cosmic Rays: the salt of the star formation recipe. Florence, Italy, 08.11-10.11.2022, Organisation: P. Caselli, A. Marcowith, M. Padovani, M.E. Palumbo, V. Rivilla.

Publikationen

Hier präsentieren wir eine tabellarische und graphische Zusammenfassung unserer Veröffentlichungen aus 2022. Die Veröffentlichungen werden nach

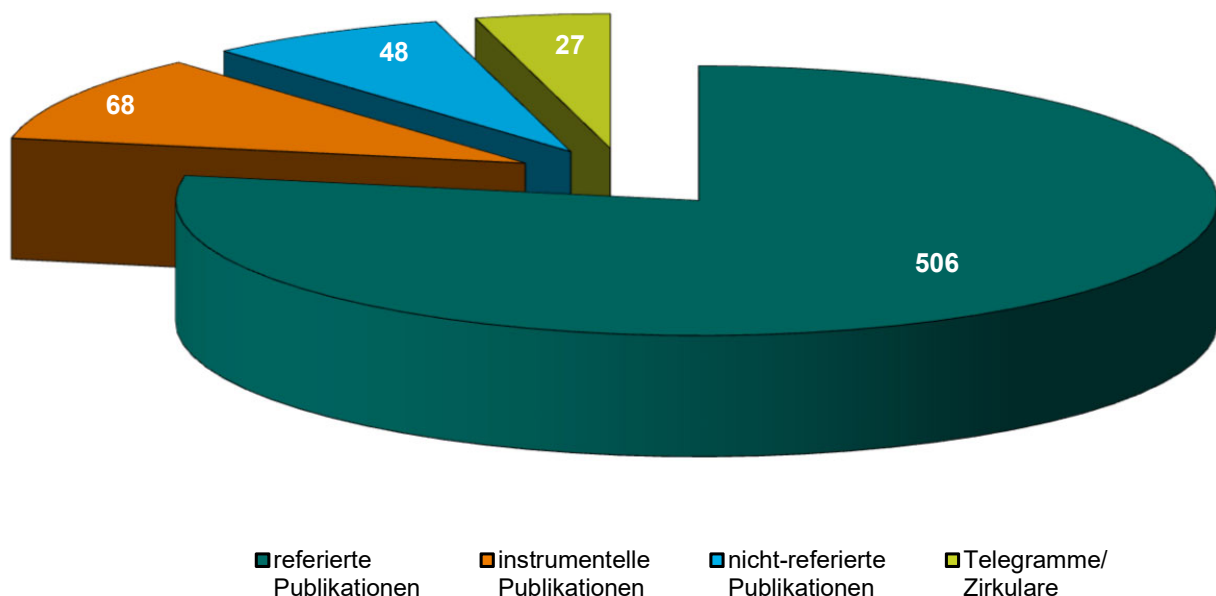
wissenschaftlicher Arbeitsgruppe und Publikationstyp gezählt. Die Gesamtliste unserer Publikationen aus den verschiedenen Kategorien ist nachfolgend aufgeführt.

Summe der MPE Publikationen in 2022

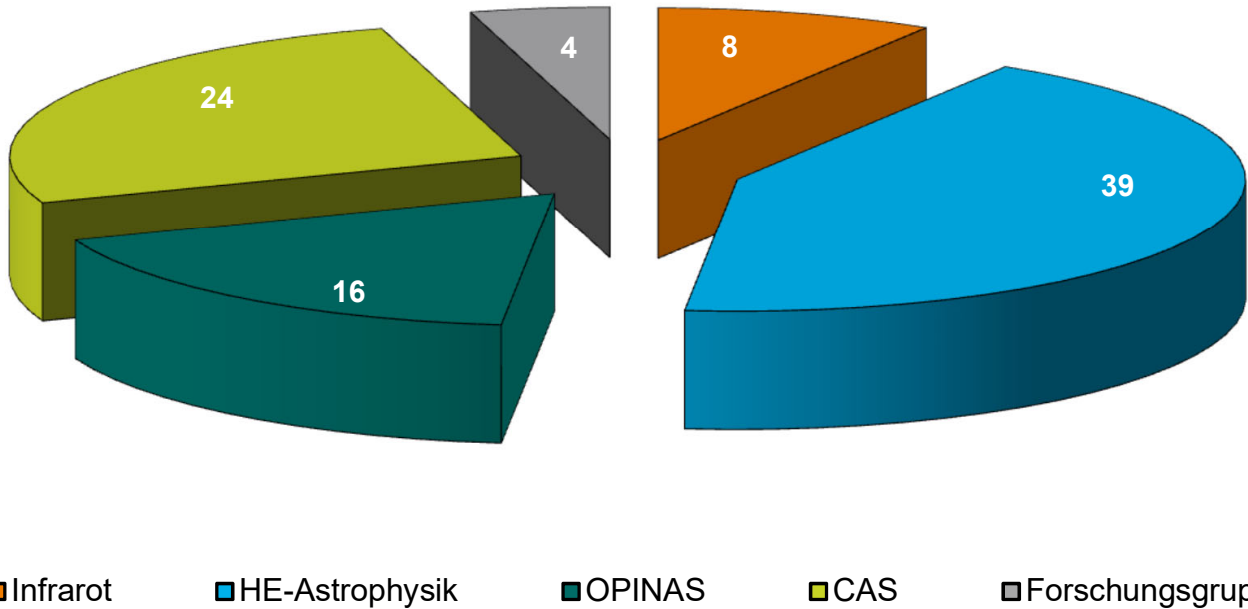
	Referierte Publikationen		Instrumentelle Publikationen		nicht-referierte Publikationen		Telegramme/ Zirkulare		Vorträge		Poster
	First Author	All	First Author	All	First Author	All	First Author	All	Invited/ Colloquium	All	Only First Author
IR	8	106	7	34	3	8	0	1	116	142	4
HE-Astro-physik	39	182	9	28	9	29	10	24	46	98	7
OPINAS	16	104	0	4	1	5	0	0	13	24	2
CAS	24	79	0	0	3	6	1	2	26	48	14
Restl. Gruppen	4	35	2	2	0	0	0	0	25	34	0
Total	91	506	18	68	16	48	11	27	226	346	27

Die Zahlen geben die Anzahl der Publikationen mit einem Erstautor vom MPE beziehungsweise die Anzahl der eingeladenen (bei Konferenzen und zu Kolloquien) Vorträge an. Die roten Zahlen zeigen die Gesamtzahl der Veröffentlichungen mit MPE-Autorenschaft (inklusive MPE Erstautoren) beziehungsweise die Gesamtzahl der gehaltenen Vorträge. Veröffentlichungen mit Beteiligung aus mehreren Arbeitsgruppen sind bei der Gruppe des führenden Autors gezählt. Bei Postern wurden nur MPE Erstautorenschaften berücksichtigt.

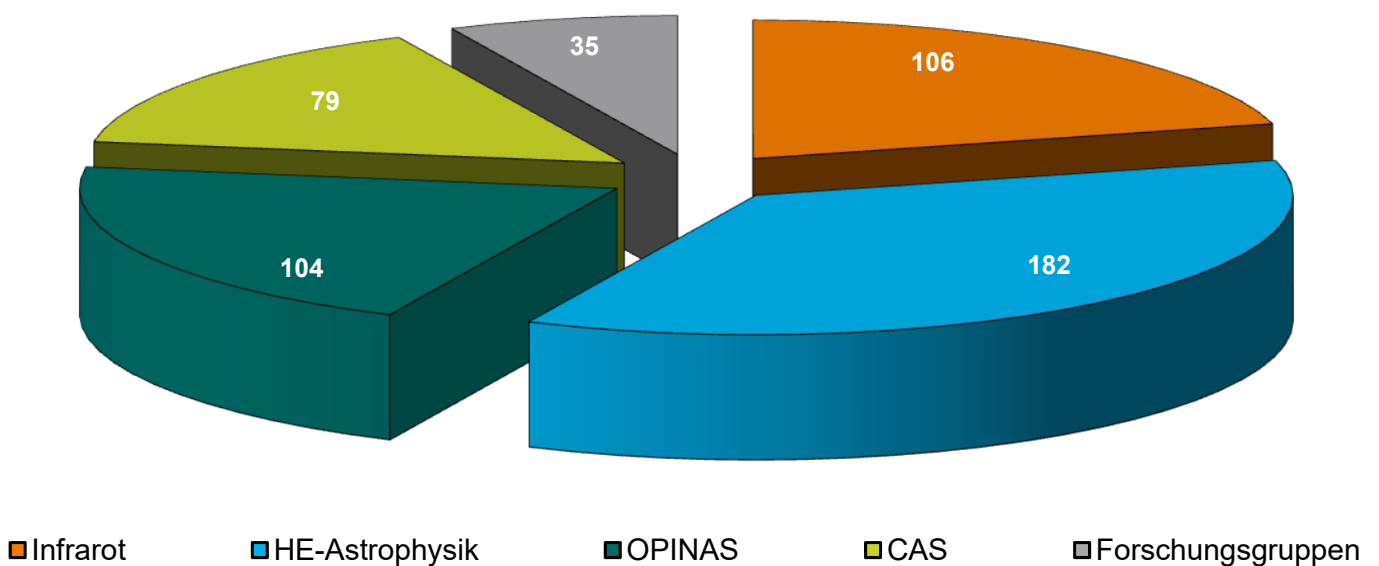
MPE Publikationen 2022 (nach Typ)



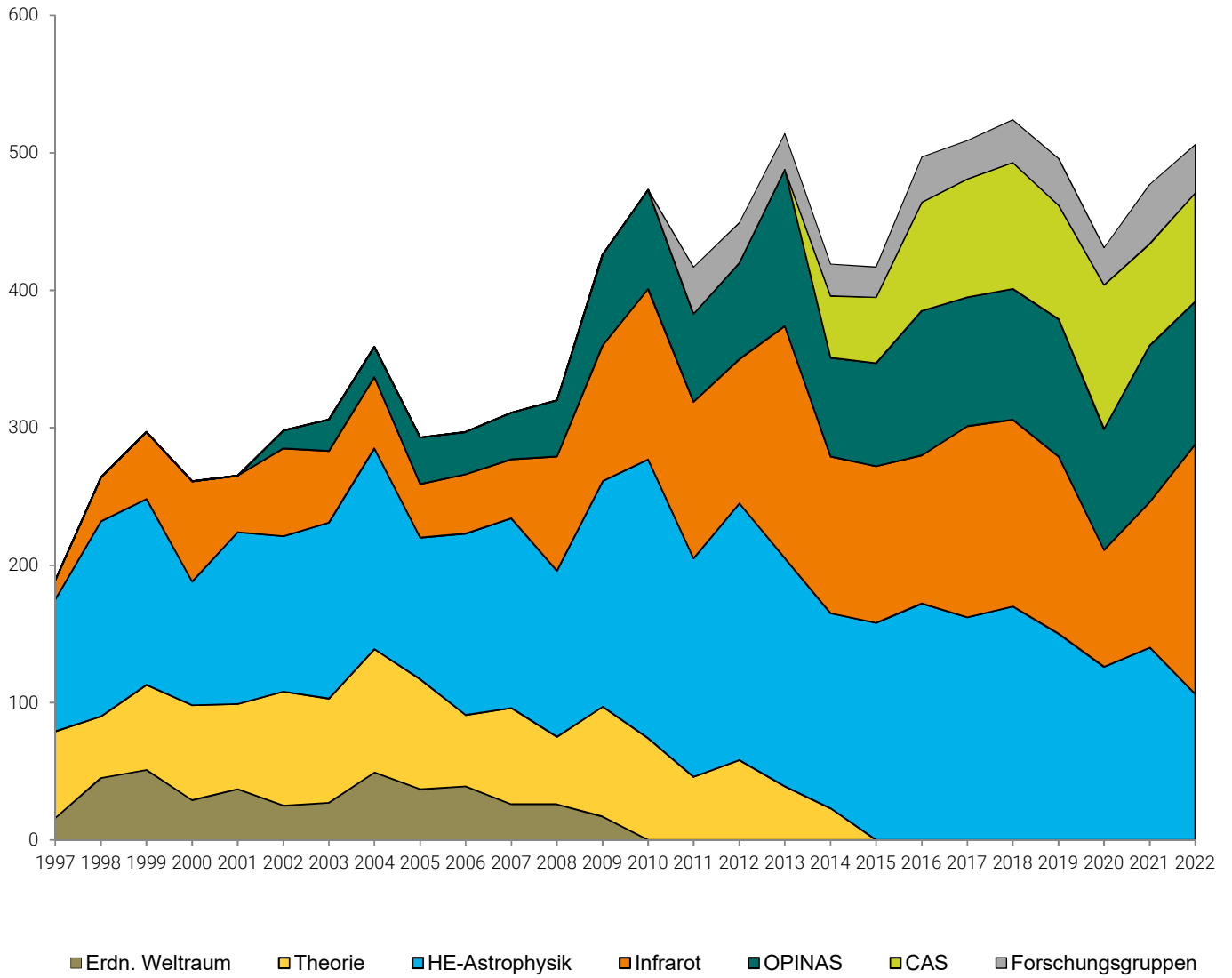
Referierte Publikationen mit MPE Erstautor in 2022 (nach wissenschaftlicher Arbeitsgruppe)



Gesamtzahl der referierten MPE Publikationen in 2022 (nach wissenschaftlicher Arbeitsgruppe)



Zeitliche Entwicklung der Gesamtzahl der referierten Publikationen (nach wissenschaftlicher Arbeitsgruppe)



Referierte Publikationen

- Abbott T., M. Aguena, A. Alarcon, S. Allam, O. Alves, A. Amon, F. Andrade-Oliveira, J. Annis, S. Avila, D. Bacon, E. Baxter, K. Bechtol, M. Becker, G. Bernstein, S. Bhargava, S. Birrer, J. Blazek, A. Brandao-Souza, S. Bridle, D. Brooks, E. Buckley-Geer, D. Burke, H. Camacho, A. Campos, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, F. Castander, R. Cawthon, C. Chang, A. Chen, R. Chen, A. Choi, C. Conselice, J. Cordero, M. Costanzi, M. Crocce, L. da Costa, M. da Silva Pereira, C. Davis, T. Davis, J. De Vicente, J. DeRose, S. Desai, E. Di Valentino, H. Diehl, J. Dietrich, S. Dodelson, P. Doel, C. Doux, A. Drlica-Wagner, K. Eckert, T. Eifler, F. Elsner, J. Elvin-Poole, S. Everett, A. Evrard, X. Fang, A. Farahi, E. Fernandez, I. Ferrero, A. Ferté, P. Fosalba, O. Friedrich, J. Frieman, J. García-Bellido, M. Gatti, E. Gaztanaga, D. Gerdes, T. Giannantonio, G. Giannini, D. Gruen, R. Gruendl, J. Gschwend, G. Gutierrez, I. Harrison, W. Hartley, K. Herner, S. Hinton, D. Hollowood, K. Honscheid, B. Hoyle, E. Huff, D. Huterer, B. Jain, D. James, M. Jarvis, N. Jeffrey, T. Jeltema, A. Kovacs, E. Krause, R. Kron, K. Kuehn, N. Kuropatkin, O. Lahav, P. Leget, P. Lemos, A. Liddle, C. Lidman, M. Lima, H. Lin, N. MacCrann, M. Maia, J. Marshall, P. Martini, J. McCullough, P. Melchior, J. Mena-Fernández, F. Menanteau, R. Miquel, J. Mohr, R. Morgan, J. Muir, J. Myles, S. Nadathur, A. Navarro-Alsina, R. Nichol, R. Ogando, Y. Omori, A. Palmese, S. Pandey, Y. Park, F. Paz-Chinchón, D. Petravick, A. Pieres, A. Plazas Malagón, A. Porredon, J. Prat, M. Raveri, M. Rodriguez-Monroy, R. Rollins, A. Romer, A. Roodman, R. Rosenfeld, A. Ross, E. Rykoff, S. Samuroff, C. Sánchez, E. Sanchez, J. Sanchez, D. Sanchez Cid, V. Scarpine, M. Schubnell, D. Scolnic, L. Secco, S. Serrano, I. Sevilla-Noarbe, E. Sheldon, T. Shin, M. Smith, M. Soares-Santos, E. Suchyta, M. Swanson, M. Tabbutt, G. Tarle, D. Thomas, C. To, A. Troja, M. Troxel, D. Tucker, I. Tutusaus, T. Varga, A. Walker, N. Weaverdyck, R. Wechsler, J. Weller, B. Yanny, B. Yin, Y. Zhang, J. Zuntz, DES Collaboration: Dark Energy Survey Year 3 results: Cosmological constraints from galaxy clustering and weak lensing. *Physical Review D* 105, 2 (2022).
- Abbott T., M. Aguena, S. Allam, A. Amon, F. Andrade-Oliveira, J. Asorey, S. Avila, G. Bernstein, E. Bertin, A. Brandao-Souza, D. Brooks, D. Burke, J. Calcino, H. Camacho, A. Carnero Rosell, D. Carollo, M. Carrasco Kind, J. Carretero, F. Castander, R. Cawthon, K. Chan, A. Choi, C. Conselice, M. Costanzi, M. Crocce, L. da Costa, M. Pereira, T. Davis, J. De Vicente, S. Desai, H. Diehl, P. Doel, K. Eckert, J. Elvin-Poole, S. Everett, A. Evrard, X. Fang, I. Ferrero, A. Ferté, B. Flaugher, P. Fosalba, J. García-Bellido, E. Gaztanaga, D. Gerdes, T. Giannantonio, K. Glazebrook, D. Gomes, D. Gruen, R. Gruendl, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. Huterer, B. Jain, D. James, T. Jeltema, N. Kokron, E. Krause, K. Kuehn, O. Lahav, G. Lewis, C. Lidman, M. Lima, H. Lin, M. Maia, U. Malik, P. Martini, P. Melchior, J. Mena-Fernández, F. Menanteau, R. Miquel, J. Mohr, R. Morgan, J. Muir, J. Myles, A. Möller, A. Palmese, F. Paz-Chinchón, W. Percival, A. Pieres, A. Plazas Malagón, A. Porredon, J. Prat, K. Reil, M. Rodriguez-Monroy, A. Romer, A. Roodman, R. Rosenfeld, A. Ross, E. Sanchez, D. Sanchez Cid, V. Scarpine, S. Serrano, I. Sevilla-Noarbe, E. Sheldon, M. Smith, M. Soares-Santos, E. Suchyta, M. Swanson, G. Tarle, D. Thomas, C. To, M. Troxel, B. Tucker, D. Tucker, I. Tutusaus, S. Uddin, T. Varga, J. Weller, R. Wilkinson, DES Collaboration: Dark Energy Survey Year 3 results: A 2.7% measurement of baryon acoustic oscillation distance scale at redshift 0.835. *Physical Review D* 105, 4 (2022).
- Abdurro'uf, K. Accetta, C. Aerts, V. Silva Aguirre, R. Ahumada, N. Ajgaonkar, N. Filiz Ak, S. Alam, C. Allende Prieto, A. Almeida, F. Anders, S.F. Anderson, B.H. Andrews, B. Anguiano, E. Aquino-Ortíz, A. Aragón-Salamanca, M. Argudo-Fernández, M. Ata, M. Aubert, V. Avila-Reese, C. Badenes, R.H. Barbá, K. Barger, J.K. Barrera-Ballesteros, R.L. Beaton, T.C. Beers, F. Belfiore, C.F. Bender, M. Bernardi, M.A. Bershad, F. Beutler, C.M. Bidin, J.C. Bird, D. Bizyaev, G.A. Blanc, M.R. Blanton, N.F. Boardman, A.S. Bolton, M. Boquien, J. Borissova, J. Bovy, W. Brandt, J. Brown, J.R. Brownstein, M. Brusa, J. Buchner, K. Bundy, J.N. Burchett, M. Bureau, A. Burgasser, T.K. Cabang, S. Campbell, M. Cappellari, J.K. Carlberg, F.C. Wanderley, R. Carrera, J. Cash, Y. Chen, W. Chen, B. Cherinka, C. Chippini, P.D. Choi, S.D. Chojnowski, H. Chung, N. Clerc, R.E. Cohen, J.M. Comerford, J. Comparat, L. da Costa, K. Covey, J.D. Crane, I. Cruz-Gonzalez, C. Culhane, K. Cunha, Y.S. Dai, G. Damke, J. Darling, Davidson, James W., Jr., R. Davies, K. Dawson, N. De Lee, A.M. Diamond-Stanic, M. Cano-Díaz, H.D. Sánchez, J. Donor, C. Duckworth, T. Dwelly, D.J. Eisenstein, Y.P. Elsworth, E. Emsellem, M. Eracleous, S. Escoffier, X. Fan, E. Farr, S. Feng, J.G. Fernández-Trincado, D. Feuillet, A. Filipp, S.P. Fillingham, P.M. Frinchaboy, S. Fromenteau, L. Galbany, R.A. García, D. García-Hernández, J. Ge, D. Geisler, J. Gelfand, T. Gérion, B.J. Gibson, J. Goddy, D. Godoy-Rivera, K. Grabowski, P.J. Green, M. Greener, C.J. Grier, E. Griffith, H. Guo, J. Guy, M. Hadrara, P. Harding, S. Hasselquist, C.R. Hayes, F. Hearty, J. Hernández, L. Hill, D.W. Hogg, J.A. Holtzman, D. Horta, B. Hsieh, C. Hsu, Y. Hsu, D. Huber, M. Huertas-Company, B. Hutchinson, H.S. Hwang, H.J. Ibarra-Medel, J.I. Chitham, G.S. Ilha, J. Imig, W. Jaekle, T. Jayasinghe, X. Ji, J.A. Johnson, A. Jones, H. Jönsson, I. Katkov, Khalatyan, Arman, Dr., K. Kinemuchi, S. Kisku, J.H. Knapen, J. Kneib, J.A. Kollmeier, M. Kong, M. Kounkel, K. Kreckel, D. Krishnarao, I. Lacerna, R.R. Lane, R. Langglin, R. Lavender, D.R. Law, D. Lazarz, H.W. Leung, H. Leung, H.M. Lewis, C. Li, R. Li, J. Lian, F. Liang, L. Lin, Y. Lin, S. Lin, C. Lintott, D. Long, P. Longa-Peña, C. López-Cobá, S. Lu, B.F. Lundgren, Y. Luo, J.T. Mackereth, A. de la Macorra, S. Mahadevan, S.R. Majewski, A. Machado, T. Mandeville, C. Maraston, B. Margalef-Bentabol, T. Masseron, K.L. Masters, S. Mathur, R.M. McDermid, M. McKay, A. Merloni, M. Merrifield, S. Meszaros, A. Miglio, F. Di Mille, D. Minniti, R. Minsley, A. Monachesi, J. Moon, B. Mosser, J. Mulchaey, D. Muna, R.R. Muñoz, A.D. Myers, N. Myers, S. Nadathur, P. Nair, K. Nandra, J. Neumann, J.A. Newman, D.L. Nidever, F. Nikakhtar, C. Nitschelm, J.E. O'Connell, L.

- Garma-Oehmichen, G. Luan Souza de Oliveira, R. Olney, D. Oravetz, M. Ortigoza-Urdaneta, Y. Osorio, J. Otter, Z.J. Pace, N. Padilla, K. Pan, H. Pan, T. Parikh, J. Parker, S. Peirani, K. Peña Ramírez, S. Penny, W.J. Percival, I. Perez-Fournon, M. Pinsonneault, F. Poidevin, V.J. Poovelil, A.M. Price-Whelan, A. Bárbara de Andrade Queiroz, M.J. Rad-dick, A. Ray, S.B. Rembold, N. Riddle, R.A. Riffel, R. Riffel, H. Rix, A.C. Robin, A. Rodríguez-Puebla, A. Roman-Lopes, C. Román-Zúñiga, B. Rose, A.J. Ross, G. Rossi, K.H. Rubin, M. Salvato, S.F. Sánchez, J.R. Sánchez-Gallego, R. Sanderson, F.A. Santana Rojas, E. Sarceno, R. Sarmiento, C. Sayres, E. Sazonova, A.L. Schaefer, R. Schiavon, D.J. Schlegel, D.P. Schneider, M. Schultheis, A. Schwöpe, A. Serenelli, J. Serna, Z. Shao, G. Shapiro, A. Sharma, Y. Shen, M. Shetrone, Y. Shu, J.D. Simon, M. Skrutskie, R. Smethurst, V. Smith, J. Sobek, T. Spoo, D. Sprague, D.V. Stark, K.G. Stassun, M. Steinmetz, D. Stello, A. Stone-Martinez, T. Storchi-Bergmann, G.S. Stringfellow, A. Stutz, Y. Su, M. Taghizadeh-Popp, M.S. Talbot, J. Tayar, E. Telles, J. Teske, A. Thakar, C. Theissen, A. Tkachenko, D. Thomas, R. Tojeiro, H. Hernandez Toledo, N.W. Troup, J.R. Trump, J. Trussler, J. Turner, S. Tuttle, E. Unda-Sanzana, J.A. Vázquez-Mata, M. Valentini, O. Valenzuela, J. Vargas-González, M. Vargas-Magaña, P.V. Alfaro, S. Villanova, F. Vincenzo, D. Wake, J.T. Warfield, J.D. Washington, B.A. Weaver, A. Weijmans, D.H. Weinberg, A. Weiss, K.B. Westfall, V. Wild, M.C. Wilde, J.C. Wilson, R.F. Wilson, M. Wilson, J. Wolf, W. Wood-Vasey, R. Yan, O. Zamora, G. Zasowski, K. Zhang, C. Zhao, Z. Zheng, Z. Zheng, K. Zhu: The Seventeenth Data Release of the Sloan Digital Sky Surveys: Complete Release of MaNGA, MaStar, and APO-GEE-2 Data. *Ap. J. Supp. Ser.* 259, 35 (2022).
- Adair C., K. Altenmüller, V. Anastassopoulos, S. Arguedas Cuendis, J. Baier, K. Barth, A. Belov, D. Bozicevic, H. Bräuninger, G. Cantatore, F. Caspers, J. Castel, S. çetin, W. Chung, H. Choi, J. Choi, T. Dafni, M. Davenport, A. Dermenev, K. Desch, B. Döbrich, H. Fischer, W. Funk, J. Galan, A. Gardikiotis, S. Gninenko, J. Golm, M. Hasinoff, D. Hoffmann, D. Díez Ibáñez, I. Irastorza, K. Jakovčić, J. Kaminski, M. Karuza, C. Krieger, ç. Kutlu, B. Lakić, J. Laurent, J. Lee, S. Lee, G. Luzón, C. Malbrunot, C. Margalejo, M. Maroudas, L. Miceli, H. Mirallas, L. Obis, A. Özbey, K. Özbozduman, M. Pivovarov, M. Rosu, J. Ruz, E. Ruiz-Chóliz, S. Schmidt, M. Schumann, Y. Semertzidis, S. Solanki, L. Stewart, I. Tsagris, T. Vafeiadis, J. Vogel, M. Vretnar, S. Youn, K. Zioutas: Search for Dark Matter Axions with CAST-CAPP. *Nature Communications* 13, 6180 (2022).
- Adams D., V. Mehta, H. Dickinson, C. Scarlata, L. Fortson, S. Kruk, B. Simmons, C. Lintott: Galaxy Zoo: Clump Scout: Surveying the Local Universe for Giant Star-forming Clumps. *Ap. J.* 931, 1 (2022).
- Akhazhanov A., A. More, A. Amini, C. Hazlett, T. Treu, S. Birrer, A. Shajib, K. Liao, C. Lemon, A. Agnello, B. Nord, M. Agüena, S. Allam, F. Andrade-Oliveira, J. Annis, D. Brooks, E. Buckley-Geer, D. Burke, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, A. Choi, C. Conselice, M. Costanzi, L. da Costa, M. Pereira, J. De Vicente, S. Desai, J. Dietrich, P. Doel, S. Everett, I. Ferrero, D. Finley, B. Flaugher, J. Frieman, J. García-Bellido, D. Gerdes, D. Gruen, R. Gruendl, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. James, A. Kim, K. Kuehn, N. Kuropatkin, O. Lahav, M. Lima, H. Lin, M. Maia, M. March, F. Menanteau, R. Miquel, R. Morgan, A. Palmese, F. Paz-Chinchón, A. Pieres, A. Plazas Malagón, E. Sanchez, V. Scarpine, S. Serrano, I. Sevilla-Noarbe, M. Smith, M. Soares-Santos, E. Suchyta, M. Swanson, G. Tarle, C. To, T. Varga, J. Weller, (DES Collaboration): Finding quadruply imaged quasars with machine learning - I. Methods. *Mon. Not. R. Astron. Soc.* 513, 2 (2022).
- Alberton D., Laboratory spectroscopy of allylimine and tentative detection towards the G+0.693-0.027 molecular cloud. *Astron. Astrophys.* 669, A93 (2022).
- Aliane A., E. Hérault, L. Dussopt, L. Rodriguez, O. Adami, J. Meilhan, V. Goudon, H. Kaya, C. Vialle, P. Agnèse, J. Sauvageot, C. Delisle, G. Lasfargues, M. Le Cocq, V. Reveret, A. Poglitsch: Optical Characterizations of Polarization-Sensitive Millimeter-Wave Silicon Bolometers. *Journal of Low Temperature Physics* 209, 322-329 (2022).
- Amon A., D. Gruen, M. Troxel, N. MacCrann, S. Dodelson, A. Choi, C. Döux, L. Secco, S. Samuroff, E. Krause, J. Cordero, J. Myles, J. DeRose, R. Wechsler, M. Gatti, A. Navarro-Alsina, G. Bernstein, B. Jain, J. Blazek, A. Alarcon, A. Ferté, P. Lemos, M. Raveri, A. Campos, J. Prat, C. Sánchez, M. Jarvis, O. Alves, F. Andrade-Oliveira, E. Baxter, K. Bechtol, M. Becker, S. Bridle, H. Camacho, A. Carnero Rosell, M. Carrasco Kind, R. Cawthon, C. Chang, R. Chen, P. Chintalapati, M. Crocce, C. Davis, H. Diehl, A. Drlica-Wagner, K. Eckert, T. Eifler, J. Elvin-Poole, S. Everett, X. Fang, P. Fosalba, O. Friedrich, E. Gaztanaga, G. Giannini, R. Gruendl, I. Harrison, W. Hartley, K. Herner, H. Huang, E. Huff, D. Huterer, N. Kuropatkin, P. Leget, A. Liddle, J. McCullough, J. Muir, S. Pandey, Y. Park, A. Porredon, A. Refregier, R. Rollins, A. Roodman, R. Rosenfeld, A. Ross, E. Rykoff, J. Sanchez, I. Sevilla-Noarbe, E. Sheldon, T. Shin, A. Troja, I. Tutusaus, I. Tutusaus, T. Varga, N. Weaverdyck, B. Yanny, B. Yin, Y. Zhang, J. Zuntz, M. Agüena, S. Allam, J. Annis, D. Bacon, E. Bertin, S. Bhargava, D. Brooks, E. Buckley-Geer, D. Burke, J. Carretero, M. Costanzi, L. da Costa, M. Pereira, J. De Vicente, S. Desai, J. Dietrich, P. Doel, I. Ferrero, B. Flaugher, J. Frieman, J. García-Bellido, E. Gaztanaga, D. Gerdes, T. Giannantonio, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, B. Hoyle, D. James, R. Kron, K. Kuehn, O. Lahav, M. Lima, H. Lin, M. Maia, J. Marshall, P. Martini, P. Melchior, F. Menanteau, R. Miquel, J. Mohr, R. Morgan, R. Ogando, A. Palmese, F. Paz-Chinchón, D. Petravick, A. Pieres, A. Romer, E. Sanchez, V. Scarpine, M. Schubnell, S. Serrano, M. Smith, M. Soares-Santos, G. Tarle, D. Thomas, C. To, J. Weller, DES Collaboration: Dark Energy Survey Year 3 results: Cosmology from cosmic shear and robustness to data calibration. *Physical Review D* 105, 2 (2022).
- Amorim, A., G. Bourdarot, W. Brandner, Y. Cao, Y. Clénet, R. Davies, P.T. de Zeeuw, J. Dexter, A. Drescher, A. Eckart, F. Eisenhauer, M. Fabricius, N.M. Foerster Schreiber, P.J.V. Garcia, R. Genzel, S. Gillessen, D. Gratadour, S. Hönig, M. Kishimoto, S. Lacour, D. Lutz, F. Millour, H. Netzer, T. Ott, T. Paumard, K. Perraut, G. Perrin, B.M.

- Peterson, P.O. Petrucci, O. Pfuhl, M.A. Prieto, D. Rouan, D.J.D. Santos, J. Shangguan, T. Shimizu, A. Sternberg, C. Straubmeier, E. Sturm, L.J. Tacconi, K.R.W. Tristram, F. Widmann, & J. Woillez: Toward measuring supermassive black hole masses with interferometric observations of the dust continuum. *Astron. Astrophys.* 669, A14 (2022).
- Anbajagane D., C. Chang, B. Jain, S. Adhikari, E. Baxter, B. Benson, L. Bleem, S. Bocquet, M. Calzadilla, J. Carlstrom, C. Chang, R. Chown, T. Crawford, A. Crites, W. Cui, T. de Haan, L. Di Mascolo, M. Dobbs, W. Everett, E. George, S. Grandis, N. Halverson, G. Holder, W. Holzappel, J. Hrubes, A. Lee, D. Luong-Van, M. McDonald, J. McMahon, S. Meyer, M. Millea, L. Mocanu, J. Mohr, T. Natoli, Y. Omori, S. Padin, C. Pryke, C. Reichardt, J. Ruhl, A. Saro, K. Schaffer, E. Shirokoff, Z. Staniszewski, A. Stark, J. Vieira, R. Williamson: Shocks in the stacked Sunyaev-Zel'dovich profiles of clusters II: Measurements from SPT-SZ + Planck Compton-y map. *Mon. Not. R. Astron. Soc.* 514, 2, 1645-1663 (2022).
- Anderson C.S., C.L. Carilli, P. Tozzi, G. Miley, S. Borgani, T. Clarke, L. Di Mascolo, A. Liu, T. Mroczkowski, M. Pannella, L. Pentericci, H. Rottgering, A. Saro: The Spiderweb Protocluster is Being Magnetized by Its Central Radio Jet. *Ap. J.* 937, 1 (2022).
- Anderson S.R., V.P. Debattista, P. Erwin, D.J. Liddicott, N. Deg, L. Beraldo e Silva: The secular growth of bars revealed by flat (peak + shoulders) density profiles. *Mon. Not. R. Astron. Soc.* 513, 2, 1642-1661 (2022).
- Andonie C., F.E. Bauer, R. Carraro, P. Arévalo, D.M. Alexander, W.N. Brandt, J. Buchner, A. He, M.J. Koss, C. Ricci, V. Salinas, M. Solimano, A. Tortosa, E. Treister: Localizing narrow Fe K α emission within bright AGN. *Astron. Astrophys.* 664, A46 (2022).
- Andrés A., J. van den Eijnden, N. Degenaar, P. Evans, K. Chatterjee, M. Reynolds, J. Miller, J. Kennea, R. Wijnands, S. Markoff, D. Altamirano, C. Heinke, A. Bahramian, G. Ponti, D. Haggard: A Swift study of long-term changes in the X-ray flaring properties of Sagittarius A. *Mon. Not. R. Astron. Soc.* 510, 2 (2022).
- Antonova A., M. Baes, A. Burkert, R.L. Davies, I. Dominguez, L. Kaper, N.D. Kylafis, S. Lucatello, G. Meylan, A. RóŻańska: EAS 2022 takes positive steps forward for sustainable astronomy. *Nature Astronomy* 6, 765 (2022).
- Arabhavi A.M., P. Woitke, S.M. Cazaux, I. Kamp, C. Rab, W. Thi: Ices in planet-forming disks: Self-consistent ice opacities in disk models. *Astron. Astrophys.* 666, A139 (2022).
- Arabsalmani M., S. Roychowdhury, F. Renaud, A. Burkert, E. Emsellem, E. Le Floch, E. Pian: Unusual Gas Structure in an Otherwise Normal Spiral Galaxy Hosting GRB 171205A/SN 2017iuk. *Astron. J.* 164, 2 (2022).
- Araki, M., K. Matsuyama: Rapid Measurements of Hydrogen Cyanide Concentration in Combustion Gas via Terahertz Spectroscopy. *Current Applied Physics* 36, p. 83-87 (2022).
- Araki, M., T. Sato, T. Oyama, S. Hoshino, K. Tsukiyama: Gas-phase CH-Overtone band spectra of methyl acetate and ethyl acetate via incoherent broad-band cavity-enhanced absorption spectroscopy. *Chemical Physics Letters* 796, p. 139568 (2022).
- Arcodia R., G. Miniutti, G. Ponti, J. Buchner, M. Giustini, A. Merloni, K. Nandra, F. Vincentelli, E. Kara, M. Salvato, D. Pasham: The complex time and energy evolution of quasi-periodic eruptions in eRO-QPE1. *Astron. Astrophys.* 662, A49 (2022).
- Arnaboldi, M. & O. Gerhard: Kinematics of the diffuse intragroup and intracluster light in groups and clusters of galaxies in the local universe within 100 Mpc distance. *Frontiers in Astronomy and Space Sciences* 9 (2022).
- Arnaboldi M., S. Bhattacharya, O. Gerhard, C. Kobayashi, K.C. Freeman, N. Caldwell, J. Hartke, A. McConnachie, P. Guhathakurta: The survey of planetary nebulae in Andromeda (M31). V. Chemical enrichment of the thin and thicker discs of Andromeda: Oxygen to argon abundance ratios for planetary nebulae and HII regions. *Astron. Astrophys.* 666, A109 (2022).
- Artur de la Villarmois E., V. Guzmán, J. Jørgensen, L. Kristensen, E. Bergin, D. Harsono, N. Sakai, E. F. van Dishoeck, S. Yamamoto: Physical properties of accretion shocks toward the Class I protostellar system Oph-IRS 44. *Astron. Astrophys.* 667, A20 (2022).
- Ashton, G., N. Bernstein, J. Buchner, X. Chen et. al.: Nested sampling for physical scientists. *Nature Reviews Methods Primers* 2, 1 (2022).
- Athikkat-Eknath G., S. Eales, M. Smith, A. Schrubba, K. Marsh, A. Whitworth: Investigating variations in the dust emissivity index in the Andromeda Galaxy. *Mon. Not. R. Astron. Soc.* 511, 4 (2022).
- Aubert M., M. Cousinou, S. Escoffier, A.J. Hawken, S. Nadathur, S. Alam, J. Bautista, E. Burtin, C. Chuang, A. de la Macorra, A. de Mattia, H. Gil-Marín, J. Hou, E. Jullio, J. Kneib, R. Neveux, G. Rossi, D. Schneider, A. Smith, A. Tamone, M. Vargas Magaña, C. Zhao: The completed SDSS-IV extended Baryon Oscillation Spectroscopic Survey: growth rate of structure measurement from cosmic voids. *Mon. Not. R. Astron. Soc.* 513, 1 (2022).
- Avery C.R., S. Wuyts, N.M. Förster Schreiber, C. Villforth, C. Bertemes, S.L. Hamer, R. Sharma, J. Toshikawa, J. Zhang: Cool outflows in MaNGA: a systematic study and comparison to the warm phase. *Mon. Not. R. Astron. Soc.* 511, 3, 4223-4237 (2022).
- Bahar Y.E., E. Bulbul, N. Clerc, V. Ghirardini, A. Liu, K. Nandra, F. Pacaud, I. Chiu, J. Comparat, J. Ider-Chitham, M. Klein, T. Liu, A. Merloni, K. Migkas, N. Okabe, M.E. Ramos-Ceja, T.H. Reiprich, J.S. Sanders, T. Schrabback: The eROSITA Final Equatorial-Depth Survey (eFEDS). X-ray properties and scaling relations of galaxy clusters and groups. *Astron. Astrophys.* 661, A7 (2022).
- Baier-Soto R., R. Herrera-Camus, N. M. Förster Schreiber, A. Contursi, R. Genzel, D. Lutz, L. Tacconi: A tentative $\sim 1000 \text{ km s}^{-1}$ offset between the [CII] 158 m and Ly α line emission in a star-forming galaxy at $z = 7.2$. *Astron. Astrophys.* 664, L5 (2022).

- Banzatti A., K.M. Abernathy, S. Brittain, A.D. Bosman, K.M. Pontoppidan, A. Boogert, S. Jensen, J. Carr, J. Najita, S. Grant, R.M. Sigler, M.A. Sanchez, J. Kern, J.T. Rayner: Scanning Disk Rings and Winds in CO at 0.01-10 au: A High-resolution M-band Spectroscopy Survey with IRTF-iSHELL. *Astron. J.* 163, 4 (2022).
- Baron D., H. Netzer, D. Lutz, J.X. Prochaska, R.I. Davies: Multiphase outflows in post-starburst E+A galaxies - I. General sample properties and the prevalence of obscured starbursts. *Mon. Not. R. Astron. Soc.* 509, 3 (2022).
- Barrena R., H. Böhringer, G. Chon: The dynamical state of RXCJ1230.7+3439: A multi-substructured merging galaxy cluster. *Astron. Astrophys.* 663, A78 (2022).
- Basso S., B. Salmaso, D. Spiga, M. Ghigo, G. Vecchi, G. Sironi, V. Cotroneo, P. Conconi, E. Redaelli, A. Bianco, G. Pareschi, G. Tagliaferri, D. Sisana, C. Pellicciari, M. Fiorini, S. Incorvaia, M. Uslenghi, L. Paoletti, C. Ferrari, R. Lolli, A. Zappettini, M. Sanchez del Rio, G. Parodi, V. Burwitz, S. Rukdee, G. Hartner, T. G. Müller, T. Schmidt, A. Langmeier, D. Della Monica Ferreira, S. Massahi, N. Gellert, F. Christensen, M. Bavdaz, I. Ferreira, M. Collon, G. Vacanti, N. Barrière: First light of BEaTriX, the new testing facility for the modular X-ray optics of the ATHENA mission. *Astron. Astrophys.* 664, A173 (2022).
- Beechert J., H. Lazar, S.E. Boggs, T.J. Brandt, Y. Chang, C. Chu, H. Gulick, C. Kierans, A. Lowell, N. Pellegrini, J.M. Roberts, T. Siebert, C. Sleator, J.A. Tomsick, A. Zoglauer: Calibrations of the Compton Spectrometer and Imager. *Nucl. Instrum. Methods Phys. Res. (A)* 1031 (2022).
- Beechert J., T. Siebert, J.A. Tomsick, A. Zoglauer, S.E. Boggs, T.J. Brandt, H. Gulick, P. Jean, C. Kierans, H. Lazar, A. Lowell, J.M. Roberts, C. Sleator, P. von Ballmoos: Measurement of Galactic 26Al with the Compton Spectrometer and Imager. *Ap. J.* 928, 2 (2022).
- Belfiore F., F. Santoro, B. Groves, E. Schinnerer, K. Kreckel, S. Glover, R. Klessen, E. Emsellem, G. Blanc, E. Congiu, A. Barnes, M. Boquien, M. Chevance, D. Dale, J.D. Kruijssen, A. Leroy, H. Pan, I. Pessa, A. Schrubba, T. Williams: A tale of two DIGs: The relative role of H II regions and low-mass hot evolved stars in powering the diffuse ionised gas (DIG) in PHANGS-MUSE galaxies. *Astron. Astrophys.* 659, A26 (2022).
- Bernardinelli P.H., G.M. Bernstein, M. Sako, B. Yanny, M. Aguena, S. Allam, F. Andrade-Oliveira, E. Bertin, D. Brooks, E. Buckley-Geer, D. Burke, A.C. Rosell, M. Carrasco Kind, J. Carretero, C. Conselice, M. Costanzi, L. da Costa, J. De Vicente, S. Desai, H. Diehl, J. Dietrich, P. Doel, K. Eckert, S. Everett, I. Ferrero, B. Flaugher, P. Fosalba, J. Frieman, J. García-Bellido, D. Gerdes, D. Gruen, R. Gruendl, J. Gschwend, S. Hinton, D. Hollowood, K. Honscheid, D. James, S. Kent, K. Kuehn, N. Kuropatkin, O. Lahav, M. Maia, M. March, F. Menanteau, R. Miquel, R. Morgan, J. Myles, R. Ogando, A. Palmese, F. Paz-Chinchón, A. Pieres, A.P. Malagón, A. Romer, A. Roodman, E. Sanchez, V. Scarpine, M. Schubnell, S. Serrano, I. Sevilla-Noarbe, M. Smith, M. Soares-Santos, E. Suchyta, M. Swanson, G. Tarle, C. To, T. Varga, A. Walker: A Search of the Full Six Years of the Dark Energy Survey for Outer Solar System Objects. *Ap. J. Supp. Ser.* 258, 2 (2022).
- Berteaud J., F. Calore, J. Iguaz, P. Serpico, T. Siebert: Strong constraints on primordial black hole dark matter from 16 years of INTEGRAL/SPI observations. *Physical Review D* 106, 2 (2022).
- Bhattacharya S., M. Arnaboldi, N. Caldwell, O. Gerhard, C. Kobayashi, J. Hartke, K.C. Freeman, A.W. McConnachie, P. Guhathakurta: The survey of planetary nebulae in Andromeda (M31) - IV. Radial oxygen and argon abundance gradients of the thin and thicker disc. *Mon. Not. R. Astron. Soc.* 517, 2, p. 2343-2359 (2022).
- Bianchi E., C. Ceccarelli, C. Codella, A. López-Sepulcre, S. Yamamoto, N. Balucani, P. Caselli, L. Podio, R. Neri, R. Bachiller, C. Favre, F. Fontani, B. Lefloch, N. Sakai, D. Segura-Cox: SOLIS. XV. CH₃CN deuteration in the SVS13-A Class I hot corino. *Astron. Astrophys.* 662, A103 (2022).
- Biffi V., J.A. ZuHone, T. Mroczkowski, E. Bulbul, W. Forman: The velocity structure of the intracluster medium during a major merger: Simulated microcalorimeter observations. *Astron. Astrophys.* 663, A76 (2022).
- Biffi V., K. Dolag, T.H. Reiprich, A. Veronica, M.E. Ramos-Ceja, E. Bulbul, N. Ota, V. Ghirardini: The eROSITA view of the Abell 3391/95 field: Case study from the Magneticum cosmological simulation. *Astron. Astrophys.* 661, A17 (2022).
- Biltzinger B., J. Burgess, T. Siebert: PySPI: A python analysis framework for INTEGRAL/SPI. *The Journal of Open Source Software* 7, 71 (2022).
- Biltzinger B., J. Greiner, J.M. Burgess, T. Siebert: Improving INTEGRAL/SPI data analysis of GRBs. *Astron. Astrophys.* 663, A102 (2022).
- Bisbas T.G., S. Walch, T. Naab, N. Lahén, R. Herrera-Camus, U.P. Steinwandel, C.M. Fotopoulou, C. Hu, P.H. Johansson: The Origin of the [C II] Deficit in a Simulated Dwarf Galaxy Merger-driven Starburst. *Ap. J.* 934, 2 (2022).
- Bleem L., T. Crawford, B. Ansarinejad, B. Benson, S. Bocquet, J. Carlstrom, C. Chang, R. Chown, A. Crites, T.d. Haan, M. Dobbs, W. Everett, E. George, R. Gualtieri, N. Halverson, G. Holder, W. Holzapfel, J. Hrubes, L. Knox, A. Lee, D. Luong-Van, D. Marrone, J. McMahon, S. Meyer, M. Millea, L. Mocanu, J. Mohr, T. Natoli, Y. Omori, S. Padin, C. Pryke, S. Raghunathan, C. Reichardt, J. Ruhl, K. Schaffer, E. Shirokoff, Z. Staniszewski, A. Stark, J. Vieira, R. Williamson: CMB/kSZ and Compton- γ Maps from 2500 deg² of SPT-SZ and Planck Survey Data. *Ap. J. Supp. Ser.* 258, 2 (2022).
- Bohn A., M. Benisty, K. Perraut, N. van der Marel, L. Wölfer, E. F. van Dishoeck, S. Facchini, C. Manara, R. Teague, L. Francis, J. Berger, R. Garcia-Lopez, C. Ginski, T. Henning, M. Kenworthy, S. Kraus, F. Ménard, A. Mérand, L. Pérez: Probing inner and outer disk misalignments in transition disks. Constraints from VLTI/GRAVITY and ALMA observations. *Astron. Astrophys.* 658, A183 (2022).
- Böhringer H., G. Chon, R. Ellis, R. Barrena, N. Laporte:

- XMM-Newton study of six massive, X-ray luminous galaxy cluster systems in the redshift range $z = 0.25-0.5$. *Astron. Astrophys.* 664, A57 (2022).
- Boller T., J. Schmitt, J. Buchner, M. Freyberg, A. Georgakakis, T. Liu, J. Robrade, A. Merloni, K. Nandra, A. Malyali, M. Krumpke, M. Salvato, T. Dwelly: The eROSITA Final Equatorial-Depth Survey (eFEDS). Variability catalogue and multi-epoch comparison. *Astron. Astrophys.* 661, A8 (2022).
- Bonne L., N. Peretto, A. Duarte-Cabral, A. Schmiedeke, N. Schneider, S. Bontemps, A. Whitworth: A potential new phase of massive star formation. A luminous outflow cavity centred on an infrared quiet core. *Astron. Astrophys.* 665, A22 (2022).
- Bovolenta G.M., S. Vogt-Geisse, S. Bovino, T. Grassi: Binding Energy Evaluation Platform: A Database of Quantum Chemical Binding Energy Distributions for the Astrophysical Community. *Ap. J. Supp. Ser.* 262, 1 (2022).
- Bozzetto, L. M., M.D. Filipović, H. Sano, R.Z.E. Alsaber, L.A. Barnes, I.S. Bojčić, R. Brose, L. Chomiuk, E.J. Crawford, S. Dai, M. Ghavam, F. Haberl, T. Hill, A.M. Hopkins, A. Ingallinera, T. Jarrett, P.J. Kavanagh, B.S. Koribalski, R. Kothes, D. Leahy, E. Lenc, I. Leonidaki, P. Maggi, C. Maitra, C. Matthew, J.L. Payne, C.M. Pennock, S. Points, W. Reid, S. Riggi, G. Rowell, M. Sasaki, S. Safi-Harb, J.T. van Loon, N.F.H. Tothill, D. Urošević & F. Zangrandi: New ASKAP radio supernova remnants and candidates in the Large Magellanic Cloud. *Mon. Not. R. Astron. Soc.* 518, 2, 2574-2598 (2022).
- Brennan S., M. Fraser, J. Johansson, A. Pastorello, R. Kotak, H. Stevance, T. Chen, J. Eldridge, S. Bose, P. Brown, E. Callis, R. Cartier, M. Dennefeld, S. Dong, P. Duffy, N. Elias-Rosa, G. Hosseinzadeh, E. Hsiao, H. Kuncarayakti, A. Martin-Carrillo, B. Monard, A. Nyholm, G. Pignata, D. Sand, B. Shappee, S. Smartt, B. Tucker, L. Wyrzykowski, H. Abbot, S. Benetti, J. Bento, S. Blondin, P. Chen, A. Delgado, L. Galbany, M. Gromadzki, C. Gutiérrez, L. Hanlon, D. Harrison, D. Hiramatsu, S. Hodgkin, T. Holoiien, D. Howell, C. Inerra, E. Kankare, S. Kozłowski, T. G. Müller-Bravo, K. Maguire, C. McCully, P. Meintjes, N. Morrell, M. Nicholl, D. O'Neill, P. Pietrukowicz, R. Poleski, J. Prieto, A. Rau, D. Reichart, T. Schweyer, M. Shahbandeh, J. Skowron, J. Sollerman, I. Soszyński, M. Stritzinger, M. Szymański, L. Tartaglia, A. Udalski, K. Ulaczyk, D. Young, M. van Leeuwen, B. van Soelen: Photometric and spectroscopic evolution of the interacting transient AT 2016jbu(Gaia16cfr). *Mon. Not. R. Astron. Soc.* 513, 4 (2022).
- Brennan S., M. Fraser, J. Johansson, A. Pastorello, R. Kotak, H. Stevance, T. Chen, J. Eldridge, S. Bose, P. Brown, E. Callis, R. Cartier, M. Dennefeld, S. Dong, P. Duffy, N. Elias-Rosa, G. Hosseinzadeh, E. Hsiao, H. Kuncarayakti, A. Martin-Carrillo, B. Monard, G. Pignata, D. Sand, B. Shappee, S. Smartt, B. Tucker, L. Wyrzykowski, H. Abbot, S. Benetti, J. Bento, S. Blondin, P. Chen, A. Delgado, L. Galbany, M. Gromadzki, C. Gutiérrez, L. Hanlon, D. Harrison, D. Hiramatsu, S. Hodgkin, T. Holoiien, D. Howell, C. Inerra, E. Kankare, S. Kozłowski, T. G. Müller-Bravo, K. Maguire, C. McCully, P. Meintjes, N. Morrell, M. Nicholl, D. O'Neill, P. Pietrukowicz, R. Poleski, J. Prieto, A. Rau, D. Reichart, T. Schweyer, M. Shahbandeh, J. Skowron, J. Sollerman, I. Soszyński, M. Stritzinger, M. Szymański, L. Tartaglia, A. Udalski, K. Ulaczyk, D. Young, M. van Leeuwen, B. van Soelen: Progenitor, environment, and modelling of the interacting transient AT 2016jbu (Gaia16cfr). *Mon. Not. R. Astron. Soc.* 513, 4 (2022).
- Brunken, N. G. C., A.S. Booth, M. Leemker, P. Nazari, N. van der Marel, & E.F. van Dishoeck: A major asymmetric ice trap in a planet-forming disk - III. First detection of dimethyl ether. *Astron. Astrophys.* 659, A29 (2022).
- Brunner H., T. Liu, G. Lamer, A. Georgakakis, A. Merloni, M. Brusa, E. Bulbul, K. Dennerl, S. Friedrich, A. Liu, C. Maitra, K. Nandra, M. E. Ramos-Ceja, J. Sanders, I. Stewart, T. Boller, J. Buchner, N. Clerc, J. Comparat, T. Dwelly, D. Eckert, A. Finoguenov, M. Freyberg, V. Ghirardini, A. Gueguen, F. Haberl, I. Kreykenbohm, M. Krumpke, S. Osterhage, F. Pacaud, P. Predehl, T. Reiprich, J. Robrade, M. Salvato, A. Santangelo, T. Schrabback, A. Schwobe, J. Wilms: The eROSITA Final Equatorial Depth Survey (eFEDS). X-ray catalogue. *Astron. Astrophys.* 661, A1 (2022).
- Brusa M., T. Urrutia, Y. Toba, J. Buchner, J. Li, T. Liu, M. Perna, M. Salvato, A. Merloni, B. Musiimenta, K. Nandra, J. Wolf, R. Arcodia, T. Dwelly, A. Georgakakis, A. Goulding, Y. Matsuoka, T. Nagao, M. Schramm, J. Silverman, Y. Terashima: The eROSITA Final Equatorial-Depth Survey (eFEDS). The first archetypal quasar in the feedback phase discovered by eROSITA. *Astron. Astrophys.* 661, A9 (2022).
- Buchner J., T. Boller, D. Bogensberger, A. Malyali, K. Nandra, J. Wilms, T. Dwelly, T. Liu: Systematic evaluation of variability detection methods for eROSITA. *Astron. Astrophys.* 661, A18 (2022).
- Bulbul E., A. Liu, T. Pasini, J. Comparat, D. Hoang, M. Klein, V. Ghirardini, M. Salvato, A. Merloni, R. Seppi, J. Wolf, S. Anderson, Y. Bahar, M. Brusa, M. Brüggen, J. Buchner, T. Dwelly, H. Ibarra-Medel, J. Ider Chitham, T. Liu, K. Nandra, M. E. Ramos-Ceja, J. Sanders, Y. Shen: The eROSITA Final Equatorial-Depth Survey (eFEDS). Galaxy clusters and groups in disguise. *Astron. Astrophys.* 661, A10 (2022).
- Burgdorf, M. J., S.A. Buehler, V.O. John, & T.G. Müller: The in-orbit performance of SEVIRI from observations of Mercury and Venus. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 15, 3215-3223 (2022).
- Burke C.J., X. Liu, Y. Shen, K.A. Phadke, Q. Yang, W.G. Hartley, I. Harrison, A. Palmese, H. Guo, K. Zhang, R. Kron, D.J. Turner, P.A. Giles, C. Lidman, Y. Chen, R.A. Gruendl, A. Choi, A. Amon, E. Sheldon, M. Aguena, S. Allam, F. Andrade-Oliveira, D. Bacon, E. Bertin, D. Brooks, A.C. Rossell, M.C. Kind, J. Carretero, C. Conselice, M. Costanzi, L. da Costa, M. Pereira, T. Davis, J. De Vicente, S. Desai, H. Diehl, S. Everett, I. Ferrero, B. Flaugher, J. García-Bellido, E. Gaztanaga, D. Gruen, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, B. Hoyle, D. James, K. Kuehn, M. Maia, J. Marshall, F. Menanteau, R. Miquel, R.

Morgan, F. Paz-Chinchón, A. Pieres, A.P. Malagón, K. Reil, A. Romer, E. Sanchez, M. Schubnell, S. Serrano, I. Sevilla-Noarbe, M. Smith, E. Suchyta, G. Tarle, D. Thomas, C. To, T. Varga, R. Wilkinson, DES Collaboration: Dwarf AGNs from Optical Variability for the Origins of Seeds (DAVOS): insights from the dark energy survey deep fields. *Mon. Not. R. Astron. Soc.* 516, 2 (2022).

Cagliari M., B. Granett, L. Guzzo, M. Bolzonella, L. Pozzetti, I. Tutusaus, S. Camera, A. Amara, N. Auricchio, R. Bender, C. Bodendorf, D. Bonino, E. Branchini, M. Brescia, V. Capobianco, C. Carbone, J. Carretero, F. Castander, M. Castellano, S. Cavuoti, A. Cimatti, R. Cledassou, G. Congedo, C. Conselice, L. Conversi, Y. Copin, L. Corcione, M. Cropper, H. Degaudenzi, M. Douspis, F. Dubath, S. Dusini, A. Ealet, S. Ferriol, N. Fourmanoit, M. Frailis, E. Franceschi, P. Franzetti, B. Garilli, C. Giocoli, A. Grazian, F. Grupp, S. Haugan, H. Hoekstra, W. Holmes, F. Hormuth, P. Hudelot, K. Jahnke, S. Kermiche, A. Kiessling, M. Kilbinger, T. Kitching, M. Kümmel, M. Kunz, H. Kurki-Suonio, S. Liori, P. Lilje, I. Lloro, E. Maiorano, O. Mansutti, O. Marggraf, K. Markovic, R. Massey, M. Meneghetti, E. Merlin, G. Meylan, M. Moresco, L. Moscardini, S. Niemi, C. Padilla, S. Paltani, F. Pasian, K. Pedersen, W. Percival, V. Pettorino, S. Pires, M. Poncet, L. Popa, F. Raison, R. Rebolo, J. Rhodes, H. Rix, M. Roncarelli, E. Rossetti, R. Saglia, R. Scaramella, P. Schneider, M. Scodeggio, A. Secroun, G. Seidel, S. Serrano, C. Sirignano, G. Sirri, D. Tavagnacco, A. Taylor, I. Terno, R. Toledo-Moreo, E. Valentijn, L. Valenziano, Y. Wang, N. Welikala, J. Weller, G. Zamorani, J. Zoubian, M. Baldi, R. Farinelli, E. Medinaceli, S. Mei, G. Polenta, E. Romelli, T. Vassallo, A. Humphrey: Euclid: Constraining ensemble photometric redshift distributions with stacked spectroscopy. *Astron. Astrophys.* 660, A9 (2022).

Camacho H., F. Andrade-Oliveira, A. Troja, R. Rosenfeld, L. Faga, R. Gomes, C. Dour, X. Fang, M. Lima, V. Miranda, T. Eifler, O. Friedrich, M. Gatti, G. Bernstein, J. Blazek, S. Bridle, A. Choi, C. Davis, J. DeRose, E. Gaztanaga, D. Gruen, W. Hartley, B. Hoyle, M. Jarvis, N. MacCrann, J. Prat, M. Rau, S. Samuroff, C. Sánchez, E. Sheldon, M. Troxel, P. Vielzeuf, J. Zuntz, T. Abbott, M. Aguena, S. Allam, J. Annis, D. Bacon, E. Bertin, D. Brooks, D. Burke, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, F. Castander, R. Cawthon, M. Costanzi, L. da Costa, M. Pereira, J. De Vicente, S. Desai, H. Diehl, P. Doel, S. Everett, A. Evrard, I. Ferrero, B. Flaugher, P. Fosalba, D. Friedel, J. Frieman, J. García-Bellido, D. Gerdes, R. Gruendl, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. Huterer, D. James, K. Kuehn, N. Kuropatkin, O. Lahav, M. Maia, J. Marshall, P. Melchior, F. Menanteau, R. Miquel, R. Morgan, F. Paz-Chinchón, D. Petravick, A. Pieres, A.P. Malagón, K. Reil, M. Rodriguez-Monroy, E. Sanchez, V. Scarpine, M. Schubnell, S. Serrano, I. Sevilla-Noarbe, M. Smith, M. Soares-Santos, E. Suchyta, G. Tarle, D. Thomas, C. To, T. Varga, J. Weller, R. Wilkinson, DES Collaboration: Cosmic shear in harmonic space from the Dark Energy Survey Year 1 Data: compatibility with configuration space results. *Mon. Not. R. Astron. Soc.* 516, 4, 5799-5815 (2022).

Capel F., J. Burgess, D. Mortlock, P. Padovani: Assessing coincident neutrino detections using population models.

Astron. Astrophys. 668, A190 (2022).

Caravano A., E. Komatsu, K.D. Lozanov, J. Weller: Lattice simulations of Abelian gauge fields coupled to axions during inflation. *Physical Review D* 105, 12 (2022).

Carilli C.L., C.S. Anderson, P. Tozzi, M. Pannella, T. Clarke, L. Pentericci, A. Liu, T. Mroczkowski, G. Miley, H. Rottgering, S. Borgani, C. Norman, A. Saro, M. Nonino, L. Di Mascolo: X-Ray Emission from the Jets and Lobes of the Spiderweb. *Ap. J.* 928, 1 (2022).

Carnero Rosell A., M. Rodriguez-Monroy, M. Crocce, J. Elvin-Poole, A. Porredon, I. Ferrero, J. Mena-Fernández, R. Cawthon, J. De Vicente, E. Gaztanaga, A. Ross, E. Sanchez, I. Sevilla-Noarbe, O. Alves, F. Andrade-Oliveira, J. Asorey, S. Avila, A. Brandao-Souza, H. Camacho, K. Chan, A. Ferté, J. Muir, W. Riquelme, R. Rosenfeld, D. Sanchez Cid, W. Hartley, N. Weaverdyck, T. Abbott, M. Aguena, S. Allam, J. Annis, E. Bertin, D. Brooks, E. Buckley-Geer, D. Burke, J. Calcino, D. Carollo, M. Carrasco Kind, J. Carretero, F. Castander, A. Choi, C. Conselice, M. Costanzi, L. da Costa, M. da Silva Pereira, T. Davis, S. Desai, H. Diehl, P. Doel, A. Drlica-Wagner, K. Eckert, S. Everett, A. Evrard, B. Flaugher, P. Fosalba, J. Frieman, J. Garcia-Bellido, D. Gerdes, T. Giannantonio, K. Glazebrook, D. Gruen, R. Gruendl, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, B. Hoyle, D. Huterer, D. James, A. Kim, E. Krause, K. Kuehn, O. Lahav, G. Lewis, C. Lidman, M. Lima, M. Maia, U. Malik, J. Marshall, F. Menanteau, R. Miquel, J. Mohr, A. Moller, R. Morgan, R. Ogando, A. Palmese, F. Paz-Chinchon, W. Percival, A. Pieres, A.P. Malagón, A. Roodman, V. Scarpine, M. Schubnell, S. Serrano, R. Sharp, E. Sheldon, M. Smith, M. Soares-Santos, E. Suchyta, M. Swanson, G. Tarle, D. Thomas, C. To, B. Tucker, D. Tucker, S. Uddin, T. Varga, DES Collaboration: Dark Energy Survey Year 3 results: galaxy sample for BAO measurement. *Mon. Not. R. Astron. Soc.* 509, 1 (2022).

Carpano S., F. Haberl, C. Maitra, M. Freyberg, K. Dennerl, A. Schwöpe, A. Buckley, I. Monageng: SRG/eROSITA discovery of 164 s pulsations from the SMC Be/X-ray binary XMMU J010429.4-723136. *Astron. Astrophys.* 661, A20 (2022).

Caselli P., J.E. Pineda, O. Sipilä, B. Zhao, E. Redaelli, S. Spezzano, M.J. Maureira, F. Alves, L. Bizzocchi, T.L. Bourke, A. Chacón-Tanarro, R. Friesen, D. Galli, J. Harju, I. Jiménez-Serra, E. Keto, Z. Li, M. Padovani, A. Schmiedeke, M. Tafalla, C. Vastel: The Central 1000 au of a Prestellar Core Revealed with ALMA. II. Almost Complete Freeze-out. *Ap. J.* 929, 1 (2022).

Cawthon R., J. Elvin-Poole, A. Porredon, M. Crocce, G. Giannini, M. Gatti, A. Ross, E. Rykoff, A. Carnero Rosell, J. DeRose, S. Lee, M. Rodriguez-Monroy, A. Amon, K. Bechtol, J. De Vicente, D. Gruen, R. Morgan, E. Sanchez, J. Sanchez, I. Sevilla-Noarbe, T. Abbott, M. Aguena, S. Allam, J. Annis, S. Avila, D. Bacon, E. Bertin, D. Brooks, D. Burke, M. Carrasco Kind, J. Carretero, F. Castander, A. Choi, M. Costanzi, L. da Costa, M. Pereira, K. Dawson, S. Desai, H. Diehl, K. Eckert, S. Everett, I. Ferrero, P. Fosalba, J. Frieman, J. García-Bellido, E. Gaztanaga, R. Gruendl, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. Huterer, D. James, A. Kim, J. Kneib, K. Kuehn,

- N. Kuropatkin, O. Lahav, M. Lima, H. Lin, M. Maia, P. Melchior, F. Menanteau, R. Miquel, J. Mohr, J. Muir, J. Myles, A. Palmese, S. Pandey, F. Paz-Chinchón, W. Percival, A. Plazas, A. Roodman, G. Rossi, V. Scarpine, S. Serrano, M. Smith, M. Soares-Santos, E. Suchyta, M. Swanson, G. Tarle, C. To, M. Troxel, R. Wilkinson, DES Collaboration: Dark Energy Survey Year 3 results: calibration of lens sample redshift distributions using clustering redshifts with BOSS/eBOSS. *Mon. Not. R. Astron. Soc.* 513, 4, 5517-5539 (2022).
- Cazaux S., H. Carrascosa, G. Muñoz Caro, P. Caselli, A. Fuente, D. Navarro-Almaida, P. Rivière-Marichalar: Photoprocessing of H₂S on dust grains. Building S chains in translucent clouds and comets. *Astron. Astrophys.* 657, A100 (2022).
- Chahine L., A. López-Sepulcre, L. Podio, C. Codella, R. Neri, S. Mercimek, M. De Simone, P. Caselli, C. Ceccarelli, M. Bouvier, N. Sakai, F. Fontani, S. Yamamoto, F. Alves, V. Lattanzi, L. Evans, C. Favre: OMC-2 FIR 4 under the microscope: Shocks, filaments, and a highly collimated jet at 100 au scales. *Astron. Astrophys.* 667, A6 (2022).
- Chahine L., A. López-Sepulcre, R. Neri, C. Ceccarelli, S. Mercimek, C. Codella, M. Bouvier, E. Bianchi, C. Favre, L. Podio, F. Alves, N. Sakai, S. Yamamoto: Organic chemistry in the protosolar analogue HOPS-108: Environment matters. *Astron. Astrophys.* 657, A78 (2022).
- Chaubal P., C. Reichardt, N. Gupta, B. Ansarinejad, K. Aylor, L. Balkenhol, E. Baxter, F. Bianchini, B. Benson, L. Bleem, S. Bocquet, J. Carlstrom, C. Chang, T. Crawford, A. Crites, T. de Haan, M. Dobbs, W. Everett, B. Floyd, E. George, N. Halverson, W. Holzapfel, J. Hrubes, L. Knox, A. Lee, D. Luong-Van, J. McMahon, S. Meyer, L. Mocuano, J. Mohr, T. Natoli, S. Padin, C. Pryke, J. Ruhl, F. Ruppin, L. Salvati, A. Saro, K. Schaffer, E. Shirokoff, Z. Staniszewski, A. Stark, J. Vieira, R. Williamson: Improving Cosmological Constraints from Galaxy Cluster Number Counts with CMB-cluster-lensing Data: Results from the SPT-SZ Survey and Forecasts for the Future. *Ap. J.* 931, 2 (2022).
- Chen C., C. Liao, I. Smail, A. Swinbank, Y. Ao, A. Bunker, S. Chapman, B. Hatsukade, R. Ivison, M.M. Lee, S. Serjeant, H. Umehata, W. Wang, Y. Zhao: An ALMA Spectroscopic Survey of the Brightest Submillimeter Galaxies in the SCUBA-2-COSMOS Field (AS2COSPEC): Survey Description and First Results. *Ap. J.* 929, 2 (2022).
- Chen M.C., J. Di Francesco, J.E. Pineda, S.S. Offner, R.K. Friesen: Turbulence and Accretion: A High-resolution Study of the B5 Filaments. *Ap. J.* 935, 1 (2022).
- Chen R., D. Scolnic, E. Roza, E. Rykoff, B. Popovic, R. Kessler, M. Vincenzi, T. Davis, P. Armstrong, D. Brout, L. Galbany, L. Kelsey, C. Lidman, A. Möller, B. Rose, M. Sako, M. Sullivan, G. Taylor, P. Wiseman, J. Asorey, A. Carr, C. Conselice, K. Kuehn, G. Lewis, E. Macaulay, M. Rodriguez-Monroy, B. Tucker, T. Abbott, M. Aguena, S. Allam, F. Andrade-Oliveira, J. Annis, D. Bacon, E. Bertin, S. Bocquet, D. Brooks, D. Burke, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, R. Cawthon, M. Costanzi, L. da Costa, M. Pereira, S. Desai, H. Diehl, P. Doel, S. Everett, I. Ferrero, B. Flaugher, D. Friedel, J. Frieman, J. García-Bellido, M. Gatti, E. Gaztanaga, D. Gruen, S. Hinton, D. Hollowood, K. Honscheid, D. James, O. Lahav, M. Lima, M. March, F. Menanteau, R. Miquel, R. Morgan, A. Palmese, F. Paz-Chinchón, A. Pieres, A. Plazas Malagón, J. Prat, A. Romer, A. Roodman, E. Sanchez, M. Schubnell, S. Serrano, I. Sevilla-Noarbe, M. Smith, M. Soares-Santos, E. Suchyta, G. Tarle, D. Thomas, C. To, D. Tucker, T. Varga: Measuring Cosmological Parameters with Type Ia Supernovae in redMaGiC Galaxies. *Ap. J.* 938, 1 (2022).
- Chernyshov D., V. Dogiel, A. Ivlev, A. Erlykin, A. Kiselev: Formation of the Cosmic-Ray Halo: The Role of Nonlinear Landau Damping. *Ap. J.* 937, 2 (2022).
- Chevance M., J.D. Kruijssen, M.R. Krumholz, B. Groves, B.W. Keller, A. Hughes, S.C. Glover, J.D. Henshaw, C.N. Herrera, J. Kim, A.K. Leroy, J. Pety, A. Razza, E. Rosolowsky, E. Schinnerer, A. Schrubba, A.T. Barnes, F. Bigiel, G.A. Blanc, D.A. Dale, E. Emsellem, C.M. Faesi, K. Grasha, R.S. Klessen, K. Kreckel, D. Liu, S.N. Longmore, S.E. Meidt, M. Querejeta, T. Saito, J. Sun, A. Usero: Pre-supernova feedback mechanisms drive the destruction of molecular clouds in nearby star-forming disc galaxies. *Mon. Not. R. Astron. Soc.* 509, 1 (2022).
- Chiavassa A., K. Kravchenko, M. Montargès, F. Millour, A. Matter, B. Freytag, M. Wittkowski, V. Hócde, P. Cruzalèbes, F. Allouche, B. Lopez, S. Lagarde, R. Petrov, A. Meilland, S. Robbe-Dubois, K. Hofmann, G. Weigelt, P. Berio, P. Bendjoya, F. Bettonvil, A. Domiciano de Souza, M. Heininger, T. Henning, J. Isbell, W. Jaffe, L. Labadie, M. Lehmitz, K. Meisenheimer, A. Soulain, J. Varga, J. Augereau, R. van Boekel, L. Burtscher, W. Danchi, C. Dominik, J. Drevon, V. Gámez Rosas, M. Hogerheijde, J. Hron, L. Klarmann, E. Kokoulina, E. Lagadec, J. Leftley, L. Mosoni, N. Nardetto, C. Paladini, E. Pantin, D. Schertl, P. Stee, L. Szabados, R. Waters, S. Wolf, G. Yoffe: The extended atmosphere and circumstellar environment of the cool evolved star VX Sagittarii as seen by MATISSE. *Astron. Astrophys.* 658, A185 (2022).
- Chiu I., V. Ghirardini, A. Liu, S. Grandis, E. Bulbul, Y.E. Bahar, J. Comparat, S. Bocquet, N. Clerc, M. Klein, T. Liu, X. Li, H. Miyatake, J. Mohr, S. More, M. Oguri, N. Okabe, F. Pacaud, M.E. Ramos-Ceja, T.H. Reiprich, T. Schrabback, K. Umetsu: The eROSITA Final Equatorial-Depth Survey (eFEDS). X-ray observable-to-mass-and-redshift relations of galaxy clusters and groups with weak-lensing mass calibration from the Hyper Suprime-Cam Subaru Strategic Program survey. *Astron. Astrophys.* 661, A11 (2022).
- Clarke J.P., O. Gerhard: The pattern speed of the Milky Way bar/bulge from VIRAC and Gaia. *Mon. Not. R. Astron. Soc.* 512, 2, 2171-2188 (2022).
- Codella C., A. López-Sepulcre, S. Ohashi, C. Chandler, M. De Simone, L. Podio, C. Ceccarelli, N. Sakai, F. Alves, A. Durán, D. Fedele, L. Loinard, S. Mercimek, N. Murillo, Y. Zhang, E. Bianchi, M. Bouvier, G. Busquet, P. Caselli, F. Dulieu, S. Feng, T. Hanawa, D. Johnstone, B. Lefloch, L. Maud, G. Moellenbrock, Y. Oya, B. Svoboda, S. Yamamoto: FAUST VI. VLA1623-2417 B: a new laboratory for astrochemistry around protostars on 50 au scale. *Mon. Not. R. Astron. Soc.* 515, 1, 543-554 (2022).

- Colzi L., D. Romano, F. Fontani, V. Rivilla, L. Bizzocchi, M. Beltran, P. Caselli, D. Elia, L. Magrini: CHEMOUT: CHEMical complexity in star-forming regions of the OUTer Galaxy. III. Nitrogen isotopic ratios in the outer Galaxy. *Astron. Astrophys.* 667, A151 (2022).
- Comparat J., N. Truong, A. Merloni, A. Pillepich, G. Ponti, S. Driver, S. Bellstedt, J. Liske, J. Aird, M. Brüggen, E. Bulbul, L. Davies, J.A.G. Villalba, A. Georgakakis, F. Haberl, T. Liu, C. Maitra, K. Nandra, P. Popesso, P. Predehl, A. Robotham, M. Salvato, J.E. Thorne, Y. Zhang: The eROSITA Final Equatorial Depth Survey (eFEDS). X-ray emission around star-forming and quiescent galaxies at $0.05 < z < 0.3$. *Astron. Astrophys.* 666, A156 (2022).
- Contarini S., G. Verza, A. Pisani, N. Hamaus, M. Sahlén, C. Carbone, S. Dusini, F. Marulli, L. Moscardini, A. Renzi, C. Sirignano, L. Stanco, M. Aubert, M. Bonici, G. Castignani, H. Courtois, S. Escoffier, D. Guinet, A. Kovacs, G. Lavaux, E. Massara, S. Nadathur, G. Pollina, T. Ronconi, F. Ruppin, Z. Sakr, A. Veropalumbo, B. Wandelt, A. Amara, N. Auricchio, M. Baldi, D. Bonino, E. Branchini, M. Brescia, J. Brinchmann, S. Camera, V. Capobianco, J. Carretero, M. Castellano, S. Cavuoti, R. Cledassou, G. Congedo, C. Conselice, L. Conversi, Y. Copin, L. Corcione, F. Courbin, M. Cropper, A. Da Silva, H. Degaudenzi, F. Dubath, C. Duncan, X. Dupac, A. Ealet, S. Farrens, S. Ferriol, P. Fosalba, M. Frailis, E. Franceschi, B. Garilli, W. Gillard, B. Gillis, C. Giocoli, A. Grazian, F. Grupp, L. Guzzo, S. Haugan, W. Holmes, F. Hormuth, K. Jahnke, M. Kümmel, S. Kermiche, A. Kiessling, M. Kilbinger, M. Kunz, H. Kurki-Suonio, R. Laureijs, S. Ligi, P. Lilje, I. Lloro, E. Maiorano, O. Mansutti, O. Marggraf, K. Markovic, R. Massey, M. Melchior, M. Meneghetti, G. Meylan, M. Moresco, E. Munari, S. Niemi, C. Padilla, S. Paltani, F. Pasian, K. Pedersen, W. Percival, V. Pettorino, S. Pires, G. Polenta, M. Poncet, L. Popa, L. Pozzetti, F. Raison, J. Rhodes, E. Rossetti, R. Saglia, B. Sartoris, P. Schneider, A. Secroun, G. Seidel, G. Sirri, C. Surace, P. Tallada-Crespí, A. Taylor, I. Tereno, R. Toledo-Moreo, F. Torradeflot, E. Valentijn, L. Valenziano, Y. Wang, J. Weller, G. Zamorani, J. Zoubian, S. Andreon, D. Maino, S. Mei: Euclid: Cosmological forecasts from the void size function. *Astron. Astrophys.* 667, A162 (2022).
- Cordero J.P., I. Harrison, R.P. Rollins, G. Bernstein, S. Bridle, A. Alarcon, O. Alves, A. Amon, F. Andrade-Oliveira, H. Camacho, A. Campos, A. Choi, J. DeRose, S. Dodelson, K. Eckert, T. Eifler, S. Everett, X. Fang, O. Friedrich, D. Gruen, R. Gruendl, W. Hartley, E. Huff, E. Krause, N. Kuropatkin, N. MacCrann, J. McCullough, J. Myles, S. Pandey, M. Raveri, R. Rosenfeld, E. Rykoff, C. Sánchez, J. Sánchez, I. Sevilla-Noarbe, E. Sheldon, M. Troxel, R. Wechsler, B. Yanny, B. Yin, Y. Zhang, M. Aguena, S. Allam, E. Bertin, D. Brooks, D. Burke, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, F. Castander, R. Cawthon, M. Costanzi, L. da Costa, M. da Silva Pereira, J. De Vicente, H. Diehl, J. Dietrich, P. Doel, J. Elvin-Poole, I. Ferrero, B. Flaugher, P. Fosalba, J. Frieman, J. Garcia-Bellido, D. Gerdes, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, B. Hoyle, D. James, K. Kuehn, O. Lahav, M. Maia, M. March, F. Menanteau, R. Miquel, R. Morgan, J. Muir, A. Palmese, F. Paz-Chinchon, A. Pieres, A. Plazas Malagón, E. Sánchez, V. Scarpine, S. Serrano, M. Smith, M. Soares-
- Santos, E. Suchyta, M. Swanson, G. Tarle, D. Thomas, C. To, T. Varga, DES Collaboration: Dark Energy Survey Year 3 results: marginalization over redshift distribution uncertainties using ranking of discrete realizations. *Mon. Not. R. Astron. Soc.* 511, 2, 2170-2185 (2022).
- Correa C.M., D.J. Paz, N.D. Padilla, A.G. Sánchez, A.N. Ruiz, R.E. Angulo: Redshift-space effects in voids and their impact on cosmological tests - II. The void-galaxy cross-correlation function. *Mon. Not. R. Astron. Soc.* 509, 2 (2022).
- Correa, C.M., D.J. Paz: Cosmology with cosmic voids. *Boletín de la Asociación Argentina de Astronomía*, 63, 193-195 (2022).
- Cosentino G., I. Jiménez-Serra, J. Tan, J. Henshaw, A. Barnes, C. Law, S. Zeng, F. Fontani, P. Caselli, S. Viti, S. Zahorecz, F. Rico-Villas, A. Megías, M. Miceli, S. Orlando, S. Ustamujic, E. Greco, G. Peres, F. Bocchino, R. Fedriani, P. Gorai, L. Testi, J. Martín-Pintado: Negative and positive feedback from a supernova remnant with SHREC: a detailed study of the shocked gas in IC443. *Mon. Not. R. Astron. Soc.* 511, 1, 953-963 (2022).
- Cotton W., F. Camilo, W. Becker, J. Condon, J. Forbrich, I. Heywood, B. Hugo, S. Legodi, T. Mauch, P. Predehl, P. Slane, M. Thompson: The Curious Case of the "Heartworm" Nebula. *Ap. J.* 934, 1 (2022).
- Crossett J., S. McGee, T. Ponman, M. E. Ramos-Ceja, M. Brown, B. Maughan, A. Robotham, J. Willis, C. Wood, J. Bland-Hawthorn, S. Brough, S. Driver, B. Holwerda, A. Hopkins, J. Loveday, M. Owers, S. Phillipps, M. Pierre, K. Pimbblet: The XXL Survey. XLV. Linking the ages of optically selected groups to their X-ray emission. *Astron. Astrophys.* 663, A2 (2022).
- Daddi E., R. Rich, F. Valentino, S. Jin, I. Delvecchio, D. Liu, V. Strazzullo, J. Neill, R. Gobat, A. Finoguenov, F. Bournaud, D. Elbaz, B. Kalita, D. O'Sullivan, T. Wang: Evidence for Cold-stream to Hot-accretion Transition as Traced by Ly α Emission from Groups and Clusters at $2 < z < 3.3$. *Ap. J. Lett.* 926, 2, L21 (2022).
- Dahlmann F., P. Jusko, M. Lara-Moreno, P. Halvick, A.N. Marimuthu, T. Michaelsen, R. Wild, K. Geistlinger, S. Schlemmer, T. Stoecklin, R. Wester, S. Brünken: Predisso- ciation spectroscopy of cold CN H_2 and CN D_2 . *Molecular Physics* 120, 15-16 (2022).
- Dahmer-Hahn L., R. Riffel, A. Rodríguez-Ardila, R. Riffel, T. Storchi-Bergmann, M. Marinello, R. Davies, L. Burtscher, D. Ruschel-Dutra, D. Rosario: Stellar populations in local AGNs: evidence for enhanced star formation in the inner 100 pc. *Mon. Not. R. Astron. Soc.* 509, 3 (2022).
- Dallilar Y., S. von Fellenberg, M. Bauboek, P. de Zeeuw, A. Drescher, F. Eisenhauer, R. Genzel, S. Gillessen, M. Habibi, T. Ott, G. Ponti, J. Stadler, O. Straub, F. Widmann, G. Witzel, A. Young: Flaremodel: An open-source Python package for one-zone numerical modelling of synchrotron sources. *Astron. Astrophys.* 658, A111 (2022).
- Dalton T., S.L. Morris, M. Fumagalli, E. Gattuzz: Probing the parameters of the intergalactic medium using quasars. *Mon. Not. R. Astron. Soc.* 513, 1, 822-834 (2022).

- Davis T.A., J. Gensior, M. Bureau, M. Cappellari, W. Choi, J.S. Elford, J.D. Kruijssen, F. Lelli, F. Liang, L. Liu, I. Ruffa, T. Saito, M. Sarzi, A. Schrubba, T.G. Williams: WISDOM Project - X. The morphology of the molecular ISM in galaxy centres and its dependence on galaxy structure. *Mon. Not. R. Astron. Soc.* 512, 1, 1522-1540 (2022).
- de Schutizer A. A., P. Rivera-Ortiz, B. Lefloch, A. Gusdorf, C. Favre, D. Segura-Cox, A. López-Sepulcre, R. Neri, J. Ospina-Zamudio, M. De Simone, C. Codella, S. Viti, L. Podio, J. Pineda, R. O'Donoghue, C. Ceccarelli, P. Caselli, F. Alves, R. Bachiller, N. Balucani, E. Bianchi, L. Bizzocchi, S. Bottinelli, E. Caux, A. Chacón-Tanarro, F. Dulieu, J. Enrique-Romero, F. Fontani, S. Feng, J. Holdship, I. Jiménez-Serra, A. Jaber Al-Edhari, C. Kahane, V. Lattanzi, Y. Oya, A. Punanova, A. Rimola, N. Sakai, S. Spezzano, I. Sims, V. Taquet, L. Testi, P. Theulé, P. Ugliengo, C. Vastel, A. Vasyunin, F. Vazart, S. Yamamoto, A. Witzel: SOLIS. XVI. Mass ejection and time variability in protostellar outflows: Cep E. *Astron. Astrophys.* 662, A104 (2022).
- de Nicola S., B. Neureiter, J. Thomas, R.P. Saglia, R. Bender: Accuracy and precision of triaxial orbit models - II. Viewing angles, shape, and orbital structure. *Mon. Not. R. Astron. Soc.* 517, 3, 3445-3458 (2022).
- de Nicola S., R.P. Saglia, J. Thomas, C. Pulsoni, M. Kluge, R. Bender, L.M. Valenzuela, R. Remus: Intrinsic Shapes of Brightest Cluster Galaxies. *Ap. J.* 933, 2 (2022).
- de Simone M., C. Ceccarelli, C. Codella, B.E. Svoboda, C.J. Chandler, M. Bouvier, S. Yamamoto, N. Sakai, Y. Yang, P. Caselli, B. Lefloch, H.B. Liu, A. López-Sepulcre, L. Loinard, J.E. Pineda, L. Testi: Tracking the Ice Mantle History in the Solar-type Protostars of NGC 1333 IRAS 4. *Ap. J. Lett.* 935, 1 (2022).
- de Simone M., C. Codella, C. Ceccarelli, A. López-Sepulcre, R. Neri, P.R. Rivera-Ortiz, G. Busquet, P. Caselli, E. Bianchi, F. Fontani, B. Lefloch, Y. Oya, J.E. Pineda: A train of shocks at 3000-au scale? Exploring the clash of an expanding bubble into the NGC 1333 IRAS 4 region. *SOLIS XIV. Mon. Not. R. Astron. Soc.* 512, 4 (2022).
- Deger S., J.C. Lee, B.C. Whitmore, D.A. Thilker, M. Biquien, R. Chandar, D.A. Dale, L. Ubeda, R. White, K. Grasha, S.C. Glover, A. Schrubba, A.T. Barnes, R. Klessen, J.D. Kruijssen, E. Rosolowsky, T.G. Williams: Bright, relatively isolated star clusters in PHANGS-HST galaxies: Aperture corrections, quantitative morphologies, and comparison with synthetic stellar population models. *Mon. Not. R. Astron. Soc.* 510, 1 (2022).
- Della Bruna L., A. Adamo, P. Amram, E. Rosolowsky, C. Usher, M. Sirressi, A. Schrubba, E. Emsellem, A. Leroy, A. Bik, W.P. Blair, A.F. McLeod, G. Östlin, F. Renaud, C. Robert, L. Rousseau-Nepton, L.J. Smith: Stellar feedback in M83 as observed with MUSE. I. Overview, an unprecedented view of the stellar and gas kinematics and evidence of outflowing gas. *Astron. Astrophys.* 660, A77 (2022).
- Delvecchio I., E. Daddi, M. Sargent, J. Aird, J. Mullaney, B. Magnelli, D. Elbaz, L. Bisigello, L. Ceraj, S. Jin, B. Kalita, D. Liu, M. Novak, I. Prandoni, J. Radcliffe, C. Spingola, G. Zamorani, V. Allevaro, G. Rodighiero, V. Smolčić: A super-linear 'radio-AGN main sequence' links mean radio-AGN power and galaxy stellar mass since $z \sim 3$. *Astron. Astrophys.* 668, A81 (2022).
- den Brok J.S., F. Bigiel, K. Sliwa, T. Saito, A. Usero, E. Schinnerer, A.K. Leroy, M.J. Jiménez-Donaire, E. Rosolowsky, A.T. Barnes, J. Puschign, J. Pety, A. Schrubba, I. Bešlić, Y. Cao, C. Eibensteiner, S.C. Glover, R.S. Klessen, J.D. Kruijssen, S.E. Meidt, L. Neumann, N. Tomičić, H. Pan, M. Querejeta, E. Watkins, T.G. Williams, D. Wilner: A CO isotopologue Line Atlas within the Whirlpool galaxy Survey (CLAWS). *Astron. Astrophys.* 662, A89 (2022).
- DeRose J., R. Wechsler, M. Becker, E. Rykoff, S. Pandey, N. MacCrann, A. Amon, J. Myles, E. Krause, D. Gruen, B. Jain, M. Troxel, J. Prat, A. Alarcon, C. Sánchez, J. Blazek, M. Croce, G. Giannini, M. Gatti, G. Bernstein, J. Zuntz, S. Dodelson, X. Fang, O. Friedrich, L. Secco, J. Elvin-Poole, A. Porredon, S. Everett, A. Choi, I. Harrison, J. Cordero, M. Rodriguez-Monroy, J. McCullough, R. Cawthon, A. Chen, O. Alves, F. Andrade-Oliveira, K. Bechtol, H. Camacho, A. Campos, A.C. Rosell, M.C. Kind, H. Diehl, A. Drlica-Wagner, K. Eckert, T. Eifler, R. Gruendl, W. Hartley, H. Huang, E. Huff, N. Kuropatkin, M. Raveri, R. Rosenfeld, A. Ross, J. Sanchez, I. Sevilla-Noarbe, E. Sheldon, B. Yanny, B. Yin, Y. Zhang, P. Fosalba, M. Aguena, S. Allam, J. Annis, S. Avila, D. Bacon, S. Bhargava, D. Brooks, E. Buckley-Geer, D. Burke, J. Carretero, F. Castander, C. Chang, M. Costanzi, L. da Costa, M. Pereira, J. De Vicente, S. Desai, J. Dietrich, P. Doel, A. Evrard, I. Ferrero, A. Ferté, B. Flaugher, J. Frieman, J. García-Bellido, E. Gaztanaga, T. Giannantonio, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. Huterer, D. James, K. Kuehn, O. Lahav, M. Lima, M. Maia, J. Marshall, P. Melchior, F. Menanteau, R. Miquel, J. Mohr, R. Morgan, A. Palmese, F. Paz-Chinchón, D. Petravick, A. Pieres, A.P. Malagón, E. Sanchez, V. Scarpine, S. Serrano, M. Smith, M. Soares-Santos, E. Suchyta, G. Tarle, D. Thomas, C. To, T. Varga, DES Collaboration: Dark Energy Survey Year 3 results: Cosmology from combined galaxy clustering and lensing validation on cosmological simulations. *Physical Review D* 105, 12 (2022).
- Dickinson H., D. Adams, V. Mehta, C. Scarlata, L. Fortson, S. Serjeant, C. Krawczyk, S. Kruk, C. Lintott, K.B. Mantha, B.D. Simmons, M. Walmsley: Galaxy Zoo: Clump Scout - Design and first application of a two-dimensional aggregation tool for citizen science. *Mon. Not. R. Astron. Soc.* 517, 4, 5882-5911 (2022).
- Diehl R., A.J. Korn, B. Leibundgut, M. Lugaro, A. Wallner: Cosmic nucleosynthesis: A multi-messenger challenge. *Progress in Particle and Nuclear Physics* 127, 103983 (2022).
- Dixon M., C. Lidman, J. Mould, L. Kelsey, D. Brout, A. Möller, P. Wiseman, M. Sullivan, L. Galbany, T. Davis, M. Vincenzi, D. Scolnic, G. Lewis, M. Smith, R. Kessler, A. Duffy, E. Taylor, C. Flynn, T. Abbott, M. Aguena, S. Allam, F. Andrade-Oliveira, J. Annis, J. Asorey, E. Bertin, S. Bocquet, D. Brooks, D. Burke, A. Carnero Rosell, D. Carollo, M. Carrasco Kind, J. Carretero, M. Costanzi, L. da Costa, M. Pereira, P. Doel, S. Everett, I. Ferrero, B. Flaugher, D. Friedel, J. Frieman, J. García-Bellido, M. Gatti, D. Gerdes, K. Glazebrook, D. Gruen, J. Gschwend, G. Gutierrez, S. Hin-

- ton, D. Hollowood, K. Honscheid, D. Huterer, D. James, K. Kuehn, N. Kuropatkin, U. Malik, M. March, F. Menanteau, R. Miquel, R. Morgan, B. Nichol, R. Ogando, A. Palmese, F. Paz-Chinchón, A. Pieres, A. Plazas Malagón, M. Rodriguez-Monroy, A. Romer, E. Sanchez, V. Scarpine, I. Sevilla-Noarbe, M. Soares-Santos, E. Suchyta, G. Tarle, C. To, B. Tucker, D. Tucker, T. Varga: Using host galaxy spectroscopy to explore systematics in the standardization of Type Ia supernovae. *Mon. Not. R. Astron. Soc.* 517, 3, 4291-4304 (2022).
- Dong Y., Z. Liu, Y. Tuo, J.F. Steiner, M. Ge, J.A. García, X. Cao: Analysis of the reflection spectra of MAXI J1535-571 in the hard and intermediate states. *Mon. Not. R. Astron. Soc.* 514, 1, 1422-1432 (2022).
- Dore, L., L. Bizzocchi, V. Lattanzi, M. Melosso, F. Tamassia, M.C. McCarthy: First Laboratory Detection of N13CO- and Semiexperimental Equilibrium Structure of the NCO- Anion. *The Journal of Physical Chemistry A*, 126, 11, 1899-1904 (2022).
- Doroshenko V., R. Staubert, C. Maitra, A. Rau, F. Haberl, A. Santangelo, A. Schwobe, J. Wilms, D. Buckley, A. Semena, I. Mereminskiy, A. Lutovinov, M. Gromadzki, L. Townsend, I. Monageng: SRGA J124404.1-632232/SRGU J124403.8-632231: New X-ray pulsar discovered in the all-sky survey by the SRG. *Astron. Astrophys.* 661, A21 (2022).
- Doux C., B. Jain, D. Zeurcher, J. Lee, X. Fang, R. Rosenfeld, A. Amon, H. Camacho, A. Choi, L. Secco, J. Blazek, C. Chang, M. Gatti, E. Gaztanaga, N. Jeffrey, M. Raveri, S. Samuroff, A. Alarcon, O. Alves, F. Andrade-Oliveira, E. Baxter, K. Bechtol, M. Becker, G. Bernstein, A. Campos, A. Carnero Rosell, M. Carrasco Kind, R. Cawthon, R. Chen, J. Cordero, M. Crocce, C. Davis, J. DeRose, S. Dodelson, A. Drlica-Wagner, K. Eckert, T. Eifler, F. Elsner, J. Elvin-Poole, S. Everett, A. Ferté, P. Fosalba, O. Friedrich, G. Giannini, D. Gruen, R. Gruendl, I. Harrison, W. Hartley, K. Herner, H. Huang, E. Huff, D. Huterer, M. Jarvis, E. Krause, N. Kuropatkin, P. Leget, P. Lemos, A. Liddle, N. MacCrann, J. McCullough, J. Muir, J. Myles, A. Navarro-Alsina, S. Pandey, Y. Park, A. Porredon, J. Prat, M. Rodriguez-Monroy, R. Rollins, A. Roodman, A. Ross, E. Rykoff, C. Sánchez, J. Sanchez, I. Sevilla-Noarbe, E. Sheldon, T. Shin, A. Troja, M. Troxel, I. Tutusaus, T. Varga, N. Weaverdyck, R. Wechsler, B. Yanny, B. Yin, Y. Zhang, J. Zuntz, T. Abbott, M. Agüena, S. Allam, J. Annis, D. Bacon, E. Bertin, S. Bocquet, D. Brooks, D. Burke, J. Carretero, M. Costanzi, L. da Costa, M. Pereira, J. De Vicente, S. Desai, H. Diehl, P. Doel, I. Ferrero, B. Flaugher, J. Frieman, J. García-Bellido, D. Gerdes, T. Giannantonio, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. James, A. Kim, K. Kuehn, O. Lahav, J. Marshall, F. Menanteau, R. Miquel, R. Morgan, R. Ogando, A. Palmese, F. Paz-Chinchón, A. Pieres, A. Plazas Malagón, K. Reil, E. Sanchez, V. Scarpine, S. Serrano, M. Smith, E. Suchyta, M. Swanson, G. Tarle, D. Thomas, C. To, J. Weller, DES Collaboration: Dark energy survey year 3 results: cosmological constraints from the analysis of cosmic shear in harmonic space. *Mon. Not. R. Astron. Soc.* 515, 2, 1942-1972 (2022).
- Driver S.P., S. Bellstedt, A.S. Robotham, I.K. Baldry, L.J. Davies, J. Liske, D. Obreschkow, E.N. Taylor, A.H. Wright, M. Alpaslan, S.P. Bamford, A.E. Bauer, J. Bland-Hawthorn, M. Bilicki, M. Bravo, S. Brough, S. Casura, M.E. Cluver, M. Colless, C.J. Conselice, S.M. Croom, J. de Jong, F. D'Eugenio, R. De Propriis, B. Dogruel, M.J. Drinkwater, A. Dvornik, D.J. Farrow, C.S. Frenk, B. Giblin, A.W. Graham, M.W. Grootes, M.L. Gunawardhana, A. Hashemizadeh, B. Häußler, C. Heymans, H. Hildebrandt, B.W. Holwerda, A.M. Hopkins, T.H. Jarrett, D. Heath Jones, L.S. Kelvin, S. Koushan, K. Kuijken, M.A. Lara-López, R. Lange, Á.R. López-Sánchez, J. Loveday, S. Mahajan, M. Meyer, A.J. Moffett, N.R. Napolitano, P. Norberg, M.S. Owers, M. Radovich, M. Raouf, J.A. Peacock, S. Phillipps, K.A. Pimblet, C. Popescu, K. Said, A.E. Sansom, M. Seibert, W.J. Sutherland, J.E. Thorne, R.J. Tuffs, R. Turner, A. van der Wel, E. van Kampen, S.M. Wilkins: Galaxy And Mass Assembly (GAMA): Data Release 4 and the $z < 0.1$ total and $z < 0.08$ morphological galaxy stellar mass functions. *Mon. Not. R. Astron. Soc.* 513, 1, 439-467 (2022).
- Drlica-Wagner A., P. Ferguson, M. Adamów, M. Agüena, S. Allam, F. Andrade-Oliveira, D. Bacon, K. Bechtol, E. Bell, E. Bertin, P. Bilaji, S. Bocquet, C. Bom, D. Brooks, D. Burke, J. Carballo-Bello, J. Carlin, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, F. Castander, W. Cerny, C. Chang, Y. Choi, C. Conselice, M. Costanzi, D. Crnojević, L. da Costa, J. de Vicente, S. Desai, J. Esteves, S. Everett, I. Ferrero, M. Fitzpatrick, B. Flaugher, D. Friedel, J. Frieman, J. García-Bellido, M. Gatti, E. Gaztanaga, D. Gerdes, D. Gruen, R. Gruendl, J. Gschwend, W. Hartley, D. Hernandez-Lang, S. Hinton, D. Hollowood, K. Honscheid, A. Hughes, A. Jacques, D. James, M. Johnson, K. Kuehn, N. Kuropatkin, O. Lahav, T. Li, C. Lidman, H. Lin, M. March, J. Marshall, D. Martínez-Delgado, C. Martínez-Vázquez, P. Masana, S. Mau, M. McNanna, P. Melchior, F. Menanteau, A. Miller, R. Miquel, J. Mohr, R. Morgan, B. Mutlu-Pakdil, R. Muñoz, E. Neilsen, D. Nidever, R. Nikutta, J. Nilo Castellon, N. Noël, R. Ogando, K. Olsen, A. Pace, A. Palmese, F. Paz-Chinchón, M. Pereira, A. Pieres, A. Plazas Malagón, J. Prat, A. Riley, M. Rodriguez-Monroy, A. Romer, A. Roodman, M. Sako, J. Sakowska, E. Sanchez, F. Sánchez, D. Sand, L. Santana-Silva, B. Santiago, M. Schubnell, S. Serrano, I. Sevilla-Noarbe, J. Simon, M. Smith, M. Soares-Santos, G. Stringfellow, E. Suchyta, D. Suson, C. Tan, G. Tarle, K. Tavangar, D. Thomas, C. To, E. Tollerud, M. Troxel, D. Tucker, T. Varga, A. Vivas, A. Walker, J. Weller, R. Wilkinson, J. Wu, B. Yanny, E. Zaborowski, A. Zenteno, Delve Collaboration, Des Collaboration, Astro Data Lab: The DECam Local Volume Exploration Survey Data Release 2. *Ap. J. Supp. Ser.* 261, 2 (2022).
- Ducci L., S. Mereghetti, A. Santangelo, L. Ji, S. Carpano, S. Covino, V. Doroshenko, F. Haberl, C. Maitra, I. Kreykenbohm, A. Udalski: eROSITA detection of flares from the Be/X-ray binary A0538-66. *Astron. Astrophys.* 661, A22 (2022).
- Dupree, A. K., K.G. Strassmeier, T. Calderwood, T. Granzer, M. Weber, K. Kravchenko, L.D. Matthews, M. Montargès, J. Tappin, & W.T. Thompson: The great dimming of Betelgeuse: a surface mass ejection and its consequences. *Ap. J.* 936, 1, 18 (2022).
- Dussopt L., A. Aliane, H. Kaya, V. Goudon, L. Rodriguez,

- C. Delisle, T. Tollet, V. Revéret, A. Poglitsch, E. Gümüs, C. Winkelmann, M. Hamdi: High-Impedance Surfaces for Above-IC Integration of Cooled Bolometer Arrays at the 350- μm Wavelength. *Journal of Low Temperature Physics* 209, 5, 1258-1263 (2022).
- Eibensteiner C., A. Barnes, F. Bigiel, E. Schinnerer, D. Liu, D. Meier, A. Usero, A. Leroy, E. Rosolowsky, J. Puschnig, I. Lazar, J. Pety, L. Lopez, E. Emsellem, I. Bešlić, M. Querejeta, E. Murphy, J. den Brok, A. Schrubba, M. Chevance, S. Glover, Y. Gao, K. Grasha, H. Hassani, J. Henshaw, M. Jimenez-Donaire, R. Klessen, J. Kruijssen, H.-A. Pan, T. Saito, M. Sormani, Y.-H. Teng, T. Williams: A 2-3 mm high-resolution molecular line survey towards the centre of the nearby spiral galaxy NGC 6946. *Astron. Astrophys.* 659, A173 (2022).
- Emsellem E., E. Schinnerer, F. Santoro, F. Belfiore, I. Pessa, R. McElroy, G.A. Blanc, E. Congiu, B. Groves, I. Ho, K. Kreckel, A. Razza, P. Sanchez-Blazquez, O. Egorov, C. Faesi, R.S. Klessen, A.K. Leroy, S. Meidt, M. Querejeta, E. Rosolowsky, F. Scheuermann, G.S. Anand, A.T. Barnes, I. Bešlić, F. Bigiel, M. Boquien, Y. Cao, M. Chevance, D.A. Dale, C. Eibensteiner, S.C. Glover, K. Grasha, J.D. Henshaw, A. Hughes, E.W. Koch, J.D. Kruijssen, J. Lee, D. Liu, H. Pan, J. Pety, T. Saito, K.M. Sandstrom, A. Schrubba, J. Sun, D.A. Thilker, A. Usero, E.J. Watkins, T.G. Williams: The PHANGS-MUSE survey. Probing the chemo-dynamical evolution of disc galaxies. *Astron. Astrophys.* 659, A191 (2022).
- Entekhabi N., J. Tan, G. Cosentino, C. Hsu, P. Caselli, C. Walsh, W. Lim, J. Henshaw, A. Barnes, F. Fontani, I. Jiménez-Serra: Astrochemical modelling of infrared dark clouds. *Astron. Astrophys.* 662, A39 (2022).
- Ercolano B., C. Rab, K. Molaverdikhani, B. Edwards, T. Preibisch, L. Testi, I. Kamp, W. Thi: Observations of PAHs in the atmospheres of discs and exoplanets. *Mon. Not. R. Astron. Soc.* 512, 1 (2022).
- Esplugues G., A. Fuente, D. Navarro-Almáida, M. Rodríguez-Baras, L. Majumdar, P. Caselli, V. Wakelam, E. Roueff, R. Bachiller, S. Spezzano, P. Rivière-Marichalar, R. Martín-Doménech, G. Muñoz Caro: Gas phase Elemental abundances in Molecular cloudS (GEMS). VI. A sulphur journey across star-forming regions: study of thioformaldehyde emission. *Astron. Astrophys.* 662, A52 (2022).
- Esposito M., V. Iršič, M. Costanzi, S. Borgani, A. Saro, M. Viel: Weighing cosmic structures with clusters of galaxies and the intergalactic medium. *Mon. Not. R. Astron. Soc.* 515, 1, 857-870 (2022).
- Euclid Collaboration, A. Borlaff, P. Gómez-Alvarez, B. Altieri, P. Marcum, R. Vavrek, R. Laureijs, R. Kohley, F. Buitrago, J. Cuillandre, P. Duc, L. Gaspar Venancio, A. Amara, S. Andreon, N. Auricchio, R. Azzollini, C. Baccigalupi, A. Balaguera-Antolínez, M. Baldi, S. Bardelli, R. Bender, A. Biviano, C. Bodendorf, D. Bonino, E. Bozzo, E. Branchini, M. Brescia, J. Brinchmann, C. Burigana, R. Cabanac, S. Camera, G. Candini, V. Capobianco, A. Cappi, C. Carbone, J. Carretero, C. Carvalho, S. Casas, F. Castander, M. Castellano, G. Castignani, S. Cavuoti, A. Cimatti, R. Cle-dassou, C. Colodro-Conde, G. Congedo, C. Conselice, L. Conversi, Y. Copin, L. Corcione, J. Coupon, H. Courtois, M. Cropper, A. Da Silva, H. Degaudenzi, D. Di Ferdinando, M. Douspis, F. Dubath, C. Duncan, X. Dupac, S. Dusini, A. Ealet, M. Fabricius, M. Farina, S. Farrens, P. Ferreira, S. Ferriol, F. Finelli, P. Flose-Reimberg, P. Fosalba, M. Frailis, E. Franceschi, M. Fumana, S. Galeotta, K. Ganga, B. Garilli, B. Gillis, C. Giocoli, G. Gozaliasl, J. Graciá-Carpio, A. Grazian, F. Grupp, S. Haugan, W. Holmes, F. Hormuth, K. Jahnke, E. Keihanen, S. Kermiche, A. Kiessling, M. Kilbinger, C. Kirkpatrick, T. Kitching, J. Knapen, B. Kubik, M. Kümmel, M. Kunz, H. Kurki-Suonio, P. Liebing, S. Ligi, P. Lilje, V. Lindholm, I. Lloro, G. Mainetti, D. Maino, O. Mansutti, O. Marggraf, K. Markovic, M. Martinelli, N. Martinet, D. Martínez-Delgado, F. Marulli, R. Massey, M. Maturi, S. Maurogordato, E. Medinaceli, S. Mei, M. Meneghetti, E. Merlin, R. Metcalf, G. Meylan, M. Moresco, G. Morgante, L. Moscardini, E. Munari, R. Nakajima, C. Neissner, S. Niemi, J. Nightingale, A. Nucita, C. Padilla, S. Paltani, F. Pasian, L. Patrizii, K. Pedersen, W. Percival, V. Pettorino, S. Pires, M. Poncet, L. Popa, D. Potter, L. Pozzetti, F. Raison, R. Rebolo, A. Renzi, J. Rhodes, G. Riccio, E. Romelli, M. Roncarelli, C. Rosset, E. Rossetti, R. Saglia, A. Sánchez, D. Sapone, M. Sauvage, P. Schneider, V. Scottez, A. Secroun, G. Seidel, S. Serrano, C. Sirignano, G. Sirri, J. Skottfelt, L. Stanco, J. Starck, F. Sureau, P. Tallada-Crespí, A. Taylor, M. Tenti, I. Tereno, R. Teyssier, R. Toledo-Moreo, F. Torradeflot, I. Tutusaus, E. Valentijn, L. Valenziano, J. Valiviita, T. Vassallo, M. Viel, Y. Wang, J. Weller, L. Whittaker, A. Zacchei, G. Zamorani, E. Zucca: Euclid preparation. XVI. Exploring the ultra-low surface brightness Universe with Euclid/VIS. *Astron. Astrophys.* 657, A92 (2022).
- Euclid Collaboration, A. Moneti, H. McCracken, M. Shuntov, O. Kauffmann, P. Capak, I. Davidzon, O. Ilbert, C. Scarlata, S. Toft, J. Weaver, R. Chary, J. Cuby, A. Faisst, D. Masters, C. McPartland, B. Mobasher, D. Sanders, R. Scaramella, D. Stern, I. Szapudi, H. Teplitz, L. Zalesky, A. Amara, N. Auricchio, C. Bodendorf, D. Bonino, E. Branchini, S. Brau-Nogue, M. Brescia, J. Brinchmann, V. Capobianco, C. Carbone, J. Carretero, F. Castander, M. Castellano, S. Cavuoti, A. Cimatti, R. Cle-dassou, G. Congedo, C. Conselice, L. Conversi, Y. Copin, L. Corcione, A. Costille, M. Cropper, A. Da Silva, H. Degaudenzi, M. Douspis, F. Dubath, C. Duncan, X. Dupac, S. Dusini, S. Farrens, S. Ferriol, P. Fosalba, M. Frailis, E. Franceschi, M. Fumana, B. Garilli, B. Gillis, C. Giocoli, B. Granett, A. Grazian, F. Grupp, S. Haugan, H. Hoekstra, W. Holmes, F. Hormuth, P. Hudelot, K. Jahnke, S. Kermiche, A. Kiessling, M. Kilbinger, T. Kitching, R. Kohley, M. Kümmel, M. Kunz, H. Kurki-Suonio, S. Ligi, P. Lilje, I. Lloro, E. Maiorano, O. Mansutti, O. Marggraf, K. Markovic, F. Marulli, R. Massey, S. Maurogordato, M. Meneghetti, E. Merlin, G. Meylan, M. Moresco, L. Moscardini, E. Munari, S. Niemi, C. Padilla, S. Paltani, F. Pasian, K. Pedersen, S. Pires, M. Poncet, L. Popa, L. Pozzetti, F. Raison, R. Rebolo, J. Rhodes, H. Rix, M. Roncarelli, E. Rossetti, R. Saglia, P. Schneider, A. Secroun, G. Seidel, S. Serrano, C. Sirignano, G. Sirri, L. Stanco, P. Tallada-Crespí, A. Taylor, I. Tereno, R. Toledo-Moreo, F. Torradeflot, Y. Wang, N. Welikala, J. Weller, G. Zamorani, J. Zoubian, S. Andreon, S. Bardelli, S. Camera, J. Graciá-Carpio, E. Medinaceli, S. Mei, G. Polenta, E. Romelli, F. Sureau, M. Tenti, T. Vassallo, A. Zacchei, E. Zucca, C. Bacci-

galupi, A. Balaguera-Antolínez, F. Bernardeau, A. Biviano, M. Bolzonella, E. Bozzo, C. Burigana, R. Cabanac, A. Cappi, C. Carvalho, S. Casas, G. Castignani, C. Colodro-Conde, J. Coupon, H. Courtois, D. Di Ferdinando, M. Farina, F. Finelli, P. Flose-Reimberg, S. Fotopoulou, S. Galeotta, K. Ganga, J. Garcia-Bellido, E. Gaztanaga, G. Gozaliasl, I. Hook, B. Joachimi, V. Kansal, E. Keihanen, C. Kirkpatrick, V. Lindholm, G. Mainetti, D. Maino, R. Maoli, M. Martinelli, N. Martinet, M. Maturi, R. Metcalf, G. Morgante, N. Morisset, A. Nucita, L. Patrizii, D. Potter, A. Renzi, G. Riccio, A. Sánchez, D. Sapone, M. Schirmer, M. Schultheis, V. Scottez, E. Sefusatti, R. Teyssier, O. Tubio, I. Tutusaus, J. Valiviita, M. Viel, H. Hildebrandt: Euclid preparation. XVII. Cosmic Dawn Survey: Spitzer Space Telescope observations of the Euclid deep fields and calibration fields. *Astron. Astrophys.* 658, A126 (2022).

Euclid Collaboration, F. Lepori, I. Tutusaus, C. Viglione, C. Bonvin, S. Camera, F. Castander, R. Durrer, P. Fosalba, G. Jelic-Cizmek, M. Kunz, J. Adamek, S. Casas, M. Martinelli, Z. Sakr, D. Sapone, A. Amara, N. Auricchio, C. Bodendorf, D. Bonino, E. Branchini, M. Brescia, J. Brinchmann, V. Capobianco, C. Carbone, J. Carretero, M. Castellano, S. Cavuoti, A. Cimatti, R. Cledassou, G. Congedo, C. Conselice, L. Conversi, Y. Copin, L. Corcione, F. Courbin, A. Da Silva, H. Degaudenzi, M. Douspis, F. Dubath, X. Dupac, S. Dusini, A. Ealet, S. Farrens, S. Ferriol, E. Franceschi, M. Fumana, B. Garilli, W. Gillard, B. Gillis, C. Giocoli, A. Grazian, F. Grupp, L. Guzzo, S. Haugan, W. Holmes, F. Hormuth, P. Hudelot, K. Jahnke, S. Kermiche, A. Kiessling, M. Kilbinger, T. Kitching, M. Kümmel, H. Kurki-Suonio, S. Ligori, P. Lilje, I. Lloro, O. Mansutti, O. Marggraf, K. Markovic, F. Marulli, R. Massey, S. Maurogordato, M. Melchior, M. Meneghetti, E. Merlin, G. Meylan, M. Moresco, L. Moscardini, E. Munari, R. Nakajima, S. Niemi, C. Padilla, S. Paltani, F. Pasian, K. Pedersen, W. Percival, V. Pettorino, S. Pires, M. Poncet, L. Popa, L. Pozzetti, F. Raison, J. Rhodes, M. Roncarelli, E. Rossetti, R. Saglia, P. Schneider, A. Secroun, G. Seidel, S. Serrano, C. Sirignano, G. Sirri, L. Stanco, J. Starck, P. Tallada-Crespí, A. Taylor, I. Tereno, R. Toledo-Moreo, F. Torradeflot, E. Valentijn, L. Valenziano, Y. Wang, J. Weller, G. Zamorani, J. Zoubian, S. Andreon, S. Bardelli, G. Fabbian, J. Graciá-Carpio, D. Maino, E. Medinaceli, S. Mei, A. Renzi, E. Romelli, F. Sureau, T. Vassallo, A. Zachei, E. Zucca, C. Baccigalupi, A. Balaguera-Antolínez, F. Bernardeau, A. Biviano, A. Blanchard, M. Bolzonella, S. Borgani, E. Bozzo, C. Burigana, R. Cabanac, A. Cappi, C. Carvalho, G. Castignani, C. Colodro-Conde, J. Coupon, H. Courtois, J. Cuby, S. Davini, S. de la Torre, D. Di Ferdinando, M. Farina, P. Ferreira, F. Finelli, S. Galeotta, K. Ganga, J. Garcia-Bellido, E. Gaztanaga, G. Gozaliasl, I. Hook, S. Ilić, B. Joachimi, V. Kansal, E. Keihanen, C. Kirkpatrick, V. Lindholm, G. Mainetti, R. Maoli, N. Martinet, M. Maturi, R. Metcalf, P. Monaco, G. Morgante, J. Nightingale, A. Nucita, L. Patrizii, V. Popa, D. Potter, G. Riccio, A. Sánchez, M. Schirmer, M. Schultheis, V. Scottez, E. Sefusatti, A. Tramacere, J. Valiviita, M. Viel, H. Hildebrandt: Euclid preparation. XIX. Impact of magnification on photometric galaxy clustering. *Astron. Astrophys.* 662, A93 (2022).

Euclid Collaboration, H. Bretonnière, M. Huertas-Company, A. Boucaud, F. Lanusse, E. Jullo, E. Merlin, D. Tuccillo, M. Castellano, J. Brinchmann, C. Conselice, H. Dole, R.

Cabanac, H. Courtois, F. Castander, P. Duc, P. Fosalba, D. Guinet, S. Kruk, U. Kuchner, S. Serrano, E. Soubrie, A. Tramacere, L. Wang, A. Amara, N. Auricchio, R. Bender, C. Bodendorf, D. Bonino, E. Branchini, S. Brau-Nogue, M. Brescia, V. Capobianco, C. Carbone, J. Carretero, S. Cavuoti, A. Cimatti, R. Cledassou, G. Congedo, L. Conversi, Y. Copin, L. Corcione, A. Costille, M. Cropper, A. Da Silva, H. Degaudenzi, M. Douspis, F. Dubath, C. Duncan, X. Dupac, S. Dusini, S. Farrens, S. Ferriol, M. Frailis, E. Franceschi, M. Fumana, B. Garilli, W. Gillard, B. Gillis, C. Giocoli, A. Grazian, F. Grupp, S. Haugan, W. Holmes, F. Hormuth, P. Hudelot, K. Jahnke, S. Kermiche, A. Kiessling, M. Kilbinger, T. Kitching, R. Kohley, M. Kümmel, M. Kunz, H. Kurki-Suonio, S. Ligori, P. Lilje, I. Lloro, E. Maiorano, O. Mansutti, O. Marggraf, K. Markovic, F. Marulli, R. Massey, S. Maurogordato, M. Melchior, M. Meneghetti, G. Meylan, M. Moresco, B. Morin, L. Moscardini, E. Munari, R. Nakajima, S. Niemi, C. Padilla, S. Paltani, F. Pasian, K. Pedersen, V. Pettorino, S. Pires, M. Poncet, L. Popa, L. Pozzetti, F. Raison, R. Rebolo, J. Rhodes, M. Roncarelli, E. Rossetti, R. Saglia, P. Schneider, A. Secroun, G. Seidel, C. Sirignano, G. Sirri, L. Stanco, J. Starck, P. Tallada-Crespí, A. Taylor, I. Tereno, R. Toledo-Moreo, F. Torradeflot, E. Valentijn, L. Valenziano, Y. Wang, N. Welikala, J. Weller, G. Zamorani, J. Zoubian, M. Baldi, S. Bardelli, S. Camera, R. Farinelli, E. Medinaceli, S. Mei, G. Polenta, E. Romelli, M. Tenti, T. Vassallo, A. Zachei, E. Zucca, C. Baccigalupi, A. Balaguera-Antolínez, A. Biviano, S. Borgani, E. Bozzo, C. Burigana, A. Cappi, C. Carvalho, S. Casas, G. Castignani, C. Colodro-Conde, J. Coupon, S. de la Torre, M. Fabricius, M. Farina, P. Ferreira, P. Flose-Reimberg, S. Fotopoulou, S. Galeotta, K. Ganga, J. Garcia-Bellido, E. Gaztanaga, G. Gozaliasl, I. Hook, B. Joachimi, V. Kansal, A. Kashlinsky, E. Keihanen, C. Kirkpatrick, V. Lindholm, G. Mainetti, D. Maino, R. Maoli, M. Martinelli, N. Martinet, H. McCracken, R. Metcalf, G. Morgante, N. Morisset, J. Nightingale, A. Nucita, L. Patrizii, D. Potter, A. Renzi, G. Riccio, A. Sánchez, D. Sapone, M. Schirmer, M. Schultheis, V. Scottez, E. Sefusatti, R. Teyssier, I. Tutusaus, J. Valiviita, M. Viel, L. Whitaker, J. Knapen: Euclid preparation. XIII. Forecasts for galaxy morphology with the Euclid Survey using deep generative models. *Astron. Astrophys.* 657, A90 (2022).

Euclid Collaboration, M. Schirmer, K. Jahnke, G. Seidel, H. Aussel, C. Bodendorf, F. Grupp, F. Hormuth, S. Wachter, P. Appleton, R. Barbier, J. Brinchmann, J. Carrasco, F. Castander, J. Coupon, F. De Paolis, A. Franco, K. Ganga, P. Hudelot, E. Jullo, A. Lançon, A. Nucita, S. Paltani, G. Smadja, F. Strafella, L. Venancio, M. Weiler, A. Amara, T. Auphan, N. Auricchio, A. Balestra, R. Bender, D. Bonino, E. Branchini, M. Brescia, V. Capobianco, C. Carbone, J. Carretero, R. Casas, M. Castellano, S. Cavuoti, A. Cimatti, R. Cledassou, G. Congedo, C. Conselice, L. Conversi, Y. Copin, L. Corcione, A. Costille, F. Courbin, A. Da Silva, H. Degaudenzi, M. Douspis, F. Dubath, X. Dupac, S. Dusini, A. Ealet, S. Farrens, S. Ferriol, P. Fosalba, M. Frailis, E. Franceschi, P. Franzetti, M. Fumana, B. Garilli, W. Gillard, B. Gillis, C. Giocoli, A. Grazian, L. Guzzo, S. Haugan, H. Hoekstra, W. Holmes, A. Hornstrup, M. Kümmel, S. Kermiche, A. Kiessling, M. Kilbinger, T. Kitching, R. Kohley, M. Kunz, H. Kurki-Suonio, R. Laureijs, S. Ligori, P. Lilje, I. Lloro, T. Maciaszek, E. Maiorano, O. Mansutti, O. Marggraf, K.

- Markovic, F. Marulli, R. Massey, S. Maurogordato, Y. Mellier, M. Meneghetti, E. Merlin, G. Meylan, M. Moresco, L. Moscardini, E. Munari, R. Nakajima, R. Nichol, S. Niemi, C. Padilla, F. Pasian, K. Pedersen, W. Percival, V. Pettorino, S. Pires, M. Poncet, L. Popa, L. Pozzetti, E. Prieto, F. Raison, J. Rhodes, H. Rix, M. Roncarelli, E. Rossetti, R. Saglia, B. Sartoris, R. Scaramella, P. Schneider, A. Secroun, S. Serrano, C. Sirignano, G. Sirri, L. Stanco, P. Tallada-Crespí, A. Taylor, H. Teplitz, I. Tereno, R. Toledo-Moreo, F. Torradeflot, M. Trifoglio, E. Valentijn, L. Valenziano, Y. Wang, J. Weller, G. Zamorani, J. Zoubian, S. Andreon, S. Bardelli, A. Boucaud, S. Camera, R. Farinelli, J. Graciá-Carpio, D. Maino, E. Medinaceli, S. Mei, N. Morisset, G. Polenta, A. Renzi, E. Romelli, M. Tenti, T. Vassallo, A. Zacchei, E. Zucca, C. Baccigalupi, A. Balaguera-Antolínez, A. Biviano, A. Blanchard, S. Borgani, E. Bozzo, C. Burigana, R. Cabanac, A. Cappi, C. Carvalho, S. Casas, G. Castignani, C. Colodro-Conde, A. Cooray, H. Courtois, M. Crocce, J. Cuby, S. Davini, S. de la Torre, D. Di Ferdinando, J. Escartin, M. Farina, P. Ferreira, F. Finelli, S. Fotopoulou, S. Galeotta, J. Garcia-Bellido, E. Gaztanaga, K. George, G. Gozaliasl, I. Hook, S. Ilić, V. Kansal, A. Kashlinsky, E. Keihanen, C. Kirkpatrick, V. Lindholm, G. Mainetti, R. Maoli, M. Martinelli, N. Martinet, M. Maturi, N. Mauri, H. McCracken, R. Metcalf, P. Monaco, G. Morgante, J. Nightingale, L. Patrizzii, A. Peel, V. Popa, C. Porciani, D. Potter, P. Reimberg, G. Riccio, A. Sánchez, D. Sapone, V. Scottez, E. Sefusatti, R. Teyssier, I. Tutusaus, C. Valieri, J. Valiviita, M. Viel, H. Hildebrandt: Euclid preparation. XVIII. The NISP photometric system. *Astron. Astrophys.* 662, A92 (2022).
- Euclid Collaboration, R. Saglia, S. De Nicola, M. Fabricius, V. Guglielmo, J. Snigula, R. Zöller, R. Bender, J. Heidt, D. Masters, D. Stern, S. Paltani, A. Amara, N. Auricchio, M. Baldi, C. Bodendorf, D. Bonino, E. Branchini, M. Brescia, J. Brinchmann, S. Camera, V. Capobianco, C. Carbone, J. Carretero, M. Castellano, S. Cavuoti, R. Cledassou, G. Congedo, C. Conselice, L. Conversi, Y. Copin, L. Corcione, F. Courbin, M. Cropper, A. Da Silva, H. Degaudenzi, M. Douspis, F. Dubath, C. Duncan, X. Dupac, S. Dusini, S. Farrens, M. Frailis, E. Franceschi, S. Galeotta, B. Garilli, W. Gillard, B. Gillis, C. Giocoli, A. Grazian, F. Grupp, S. Haugan, H. Hoekstra, W. Holmes, F. Hormuth, A. Hornstrup, K. Jahnke, M. Kümmel, S. Kermiche, A. Kiessling, M. Kunz, H. Kurki-Suonio, R. Laureijs, S. Ligi, P. Lilje, I. Lloro, E. Maiorano, O. Marggraf, K. Markovic, F. Marulli, R. Massey, H. McCracken, M. Melchior, G. Meylan, M. Moresco, L. Moscardini, E. Munari, S. Niemi, C. Padilla, F. Pasian, K. Pedersen, W. Percival, V. Pettorino, S. Pires, M. Poncet, L. Popa, L. Pozzetti, F. Raison, A. Renzi, J. Rhodes, G. Riccio, E. Romelli, E. Rossetti, D. Sapone, B. Sartoris, P. Schneider, A. Secroun, G. Seidel, C. Sirignano, G. Sirri, L. Stanco, P. Tallada-Crespí, D. Tavagnacco, A. Taylor, I. Tereno, R. Toledo-Moreo, F. Torradeflot, I. Tutusaus, E. Valentijn, L. Valenziano, T. Vassallo, Y. Wang, A. Zacchei, G. Zamorani, J. Zoubian, S. Andreon, S. Bardelli, J. Graciá-Carpio, D. Maino, N. Mauri, A. Tramacere, E. Zucca, A. Alvarez Ayllon, H. Aussel, C. Baccigalupi, A. Balaguera-Antolínez, M. Ballardini, A. Biviano, M. Bolzonella, E. Bozzo, C. Burigana, R. Cabanac, A. Cappi, C. Carvalho, S. Casas, G. Castignani, A. Cooray, J. Coupon, H. Courtois, S. Davini, G. Desprez, H. Dole, J. Escartin, S. Escoffier, M. Farina, S. Fotopoulou, K. Ganga, J. Garcia-Bellido, K. George, F. Giacomini, G. Gozaliasl, H. Hildebrandt, I. Hook, O. Ilbert, V. Kansal, A. Kashlinsky, E. Keihanen, C. Kirkpatrick, A. Loureiro, J. Macías-Pérez, M. Magliocchetti, G. Mainetti, R. Maoli, M. Martinelli, N. Martinet, R. Metcalf, G. Morgante, S. Nadathur, A. Nucita, L. Patrizzii, V. Popa, C. Porciani, D. Potter, A. Pourtsidou, P. Reimberg, A. Sánchez, Z. Sakr, M. Schirmer, E. Sefusatti, M. Sereno, J. Stadel, R. Teyssier, C. Valieri, J. Valiviita, A. Veropalumbo, M. Viel: Euclid preparation. XX. The Complete Calibration of the Color-Redshift Relation survey: LBT observations and data release. *Astron. Astrophys.* 664, A196 (2022).
- Euclid Collaboration, R. Scaramella, J. Amiaux, Y. Mellier, C. Burigana, C. Carvalho, J. Cuillandre, A. Da Silva, A. Derosa, J. Dinis, E. Maiorano, M. Maris, I. Tereno, R. Laureijs, T. Boenke, G. Buenadicha, X. Dupac, L. Gaspar Venancio, P. Gómez-Álvarez, J. Hoar, J. Lorenzo Alvarez, G. Racca, G. Saavedra-Criado, J. Schwartz, R. Vavrek, M. Schirmer, H. Aussel, R. Azzollini, V. Cardone, M. Cropper, A. Ealet, B. Garilli, W. Gillard, B. Granett, L. Guzzo, H. Hoekstra, K. Jahnke, T. Kitching, T. Maciaszek, M. Meneghetti, L. Miller, R. Nakajima, S. Niemi, F. Pasian, W. Percival, S. Pottinger, M. Sauvage, M. Scodreggio, S. Wachter, A. Zacchei, N. Aghanim, A. Amara, T. Auphan, N. Auricchio, S. Awan, A. Balestra, R. Bender, C. Bodendorf, D. Bonino, E. Branchini, S. Brau-Nogue, M. Brescia, G. Candini, V. Capobianco, C. Carbone, R. Carlberg, J. Carretero, R. Casas, F. Castander, M. Castellano, S. Cavuoti, A. Cimatti, R. Cledassou, G. Congedo, C. Conselice, L. Conversi, Y. Copin, L. Corcione, A. Costille, F. Courbin, H. Degaudenzi, M. Douspis, F. Dubath, C. Duncan, S. Dusini, S. Farrens, S. Ferriol, P. Fosalba, N. Fourmanoit, M. Frailis, E. Franceschi, P. Franzetti, M. Fumana, B. Gillis, C. Giocoli, A. Grazian, F. Grupp, S. Haugan, W. Holmes, F. Hormuth, P. Hudelot, S. Kermiche, A. Kiessling, M. Kilbinger, R. Kohley, B. Kubik, M. Kümmel, M. Kunz, H. Kurki-Suonio, O. Lahav, S. Ligi, P. Lilje, I. Lloro, O. Mansutti, O. Marggraf, K. Markovic, F. Marulli, R. Massey, S. Maurogordato, M. Melchior, E. Merlin, G. Meylan, J. Mohr, M. Moresco, B. Morin, L. Moscardini, E. Munari, R. Nichol, C. Padilla, S. Paltani, J. Peacock, K. Pedersen, V. Pettorino, S. Pires, M. Poncet, L. Popa, L. Pozzetti, F. Raison, R. Rebolo, J. Rhodes, H. Rix, M. Roncarelli, E. Rossetti, R. Saglia, P. Schneider, T. Schrabback, A. Secroun, G. Seidel, S. Serrano, C. Sirignano, G. Sirri, J. Skottfelt, L. Stanco, J. Starck, P. Tallada-Crespí, D. Tavagnacco, A. Taylor, H. Teplitz, R. Toledo-Moreo, F. Torradeflot, M. Trifoglio, E. Valentijn, L. Valenziano, G. Verdoes Kleijn, Y. Wang, N. Welikala, J. Weller, M. Wetzstein, G. Zamorani, J. Zoubian, S. Andreon, M. Baldi, S. Bardelli, A. Boucaud, S. Camera, D. Di Ferdinando, G. Fabbian, R. Farinelli, S. Galeotta, J. Graciá-Carpio, D. Maino, E. Medinaceli, S. Mei, C. Neissner, G. Polenta, A. Renzi, E. Romelli, C. Rosset, F. Sureau, M. Tenti, T. Vassallo, E. Zucca, C. Baccigalupi, A. Balaguera-Antolínez, P. Battaglia, A. Biviano, S. Borgani, E. Bozzo, R. Cabanac, A. Cappi, S. Casas, G. Castignani, C. Colodro-Conde, J. Coupon, H. Courtois, J. Cuby, S. de la Torre, S. Desai, H. Dole, M. Fabricius, M. Farina, P. Ferreira, F. Finelli, P. Flore-Reimberg, S. Fotopoulou, K. Ganga, G. Gozaliasl, I. Hook, E. Keihanen, C. Kirkpatrick, P. Liebing, V. Lindholm, G. Mainetti, M. Martinelli, N. Martinet, M. Maturi, H. McCracken, R. Metcalf,

G. Morgante, J. Nightingale, A. Nucita, L. Patrizii, D. Potter, G. Riccio, A. Sánchez, D. Sapone, J. Schewtschenko, M. Schultheis, V. Scottez, R. Teyssier, I. Tutusaus, J. Valiviita, M. Viel, W. Vriend, L. Whittaker: Euclid preparation. I. The Euclid Wide Survey. *Astron. Astrophys.* 662, A112 (2022).

Euclid Collaboration, S. Ilić, N. Aghanim, C. Baccigalupi, J. Bermejo-Climent, G. Fabbian, L. Legrand, D. Paoletti, M. Ballardini, M. Archidiacono, M. Douspis, F. Finelli, K. Ganga, C. Hernández-Monteagudo, M. Lattanzi, D. Marinucci, M. Migliaccio, C. Carbone, S. Casas, M. Martinelli, I. Tutusaus, P. Natoli, P. Ntelis, L. Pagano, L. Wenzl, A. Gruppuso, T. Kitching, M. Langer, N. Mauri, L. Patrizii, A. Renzi, G. Sirri, L. Stanco, M. Tenti, P. Vielzeuf, F. Lacasa, G. Polenta, V. Yankelevich, A. Blanchard, Z. Sakr, A. Poursidou, S. Camera, V. Cardone, M. Kilbinger, M. Kunz, K. Markovic, V. Pettorino, A. Sánchez, D. Sapone, A. Amara, N. Auricchio, R. Bender, C. Bodendorf, D. Bonino, E. Branchini, M. Brescia, J. Brinchmann, V. Capobianco, J. Carretero, F. Castander, M. Castellano, S. Cavuoti, A. Cimatti, R. Cledassou, G. Congedo, C. Conselice, L. Conversi, Y. Copin, L. Corcione, A. Costille, M. Cropper, A. Da Silva, H. Degaudenzi, F. Dubath, C. Duncan, X. Dupac, S. Dusini, A. Ealet, S. Farrens, P. Fosalba, M. Frailis, E. Franceschi, P. Franzetti, M. Fumana, B. Garilli, W. Gillard, B. Gillis, C. Giocoli, A. Grazian, F. Grupp, L. Guzzo, S. Haugan, H. Hoekstra, W. Holmes, F. Hormuth, P. Hudelot, K. Jahnke, S. Kermiche, A. Kiessling, R. Kohley, B. Kubik, M. Kümmel, H. Kurki-Suonio, R. Laureijs, S. Ligi, P. Lilje, I. Lloro, O. Mansutti, O. Marggraf, F. Marulli, R. Massey, S. Maurogordato, M. Meneghetti, E. Merlin, G. Meylan, M. Moresco, B. Morin, L. Moscardini, E. Munari, S. Niemi, C. Padilla, S. Paltani, F. Pasian, K. Pedersen, W. Percival, S. Pires, M. Poncet, L. Popa, L. Pozzetti, F. Raison, R. Rebolo, J. Rhodes, M. Roncarelli, E. Rossetti, R. Saglia, R. Scaramella, P. Schneider, A. Secroun, G. Seidel, S. Serrano, C. Sirignano, J. Starck, P. Tallada-Crespí, A. Taylor, I. Tereno, R. Toledo-Moreo, F. Torradeflot, E. Valentijn, L. Valenziano, G. Verdoes Kleijn, Y. Wang, N. Welikala, J. Weller, G. Zamorani, J. Zoubian, E. Medinaceli, S. Mei, C. Rosset, F. Sureau, T. Vassallo, A. Zacchei, S. Andreon, A. Balaguera-Antolínez, M. Baldi, S. Bardelli, A. Biviano, S. Borgani, E. Bozzo, C. Burigana, R. Cabanac, A. Cappi, C. Carvalho, G. Castignani, C. Colodro-Conde, J. Coupon, H. Courtois, J. Cuby, S. de la Torre, D. Di Ferdinando, H. Dole, M. Farina, P. Ferreira, P. Flose-Reimberg, S. Galeotta, G. Gozaliasl, J. Graciá-Carpio, E. Keihanen, C. Kirkpatrick, V. Lindholm, G. Mainetti, D. Maino, N. Martinet, M. Maturi, R. Metcalf, G. Morgante, C. Neissner, J. Nightingale, A. Nucita, D. Potter, G. Riccio, E. Romelli, M. Schirmer, M. Schultheis, V. Scottez, R. Teyssier, A. Tramacere, J. Valiviita, M. Viel, L. Whittaker, E. Zucca: Euclid preparation. XV. Forecasting cosmological constraints for the Euclid and CMB joint analysis. *Astron. Astrophys.* 657, A91 (2022).

Euclid Collaboration, S. van Mierlo, K. Caputi, M. Ashby, H. Atek, M. Bolzonella, R. Bowler, G. Brammer, C. Conselice, J. Cuby, P. Dayal, A. Díaz-Sánchez, S. Finkelstein, H. Hoekstra, A. Humphrey, O. Ilbert, H. McCracken, B. Milvang-Jensen, P. Oesch, R. Pello, G. Rodighiero, M.

Schirmer, S. Toft, J. Weaver, S. Wilkins, C. Willott, G. Zamorani, A. Amara, N. Auricchio, M. Baldi, R. Bender, C. Bodendorf, D. Bonino, E. Branchini, M. Brescia, J. Brinchmann, S. Camera, V. Capobianco, C. Carbone, J. Carretero, M. Castellano, S. Cavuoti, A. Cimatti, R. Cledassou, G. Congedo, L. Conversi, Y. Copin, L. Corcione, F. Courbin, A. Da Silva, H. Degaudenzi, M. Douspis, F. Dubath, X. Dupac, S. Dusini, S. Farrens, S. Ferriol, M. Frailis, E. Franceschi, P. Franzetti, M. Fumana, S. Galeotta, B. Garilli, W. Gillard, B. Gillis, C. Giocoli, A. Grazian, F. Grupp, S. Haugan, W. Holmes, F. Hormuth, A. Hornstrup, K. Jahnke, M. Kümmel, A. Kiessling, M. Kilbinger, T. Kitching, R. Kohley, M. Kunz, H. Kurki-Suonio, R. Laureijs, S. Ligi, P. Lilje, I. Lloro, E. Maiorano, O. Mansutti, O. Marggraf, K. Markovic, F. Marulli, R. Massey, S. Maurogordato, E. Medinaceli, M. Meneghetti, E. Merlin, G. Meylan, M. Moresco, L. Moscardini, E. Munari, S. Niemi, C. Padilla, S. Paltani, F. Pasian, K. Pedersen, V. Pettorino, S. Pires, M. Poncet, L. Popa, L. Pozzetti, F. Raison, A. Renzi, J. Rhodes, G. Riccio, E. Romelli, E. Rossetti, R. Saglia, D. Sapone, B. Sartoris, P. Schneider, A. Secroun, C. Sirignano, G. Sirri, L. Stanco, J. Starck, C. Surace, P. Tallada-Crespí, A. Taylor, I. Tereno, R. Toledo-Moreo, F. Torradeflot, I. Tutusaus, E. Valentijn, L. Valenziano, T. Vassallo, Y. Wang, A. Zacchei, J. Zoubian, S. Andreon, S. Bardelli, A. Boucaud, J. Graciá-Carpio, D. Maino, N. Mauri, S. Mei, F. Sureau, E. Zucca, H. Aussel, C. Baccigalupi, A. Balaguera-Antolínez, A. Biviano, A. Blanchard, S. Borgani, E. Bozzo, C. Burigana, R. Cabanac, F. Calura, A. Cappi, C. Carvalho, S. Casas, G. Castignani, C. Colodro-Conde, A. Cooray, J. Coupon, H. Courtois, M. Crocce, O. Cucciati, S. Davini, H. Dole, J. Escartin, S. Ecoffier, M. Fabricius, M. Farina, K. Ganga, J. García-Bellido, K. George, F. Giacomini, G. Gozaliasl, S. Gwyn, I. Hook, M. Huertas-Company, V. Kansal, A. Kashlinsky, E. Keihanen, C. Kirkpatrick, V. Lindholm, R. Maoli, M. Martinelli, N. Martinet, M. Maturi, R. Metcalf, P. Monaco, G. Morgante, A. Nucita, L. Patrizii, A. Peel, J. Pollack, V. Popa, C. Porciani, D. Potter, P. Reimberg, A. Sánchez, V. Scottez, E. Sefusatti, J. Stadel, R. Teyssier, J. Valiviita, M. Viel: Euclid preparation. XXI. Intermediate-redshift contaminants in the search for $z > 6$ galaxies within the Euclid Deep Survey (Corrigendum). *Astron. Astrophys.* 668, C3 (2022).

Evans L., F. Fontani, C. Vastel, C. Ceccarelli, P. Caselli, A. López-Sepulcre, R. Neri, F. Alves, L. Chahine, C. Favre, V. Lattanzi: SOLIS. XIII. Nitrogen fractionation towards the protocluster OMC-2 FIR4. *Astron. Astrophys.* 657, A136 (2022).

Everett S., B. Yanny, N. Kuropatkin, E. Huff, Y. Zhang, J. Myles, A. Masegian, J. Elvin-Poole, S. Allam, G. Bernstein, I. Sevilla-Noarbe, M. Spletstoesser, E. Sheldon, M. Jarvis, A. Amon, I. Harrison, A. Choi, W. Hartley, A. Alarcon, C. Sánchez, D. Gruen, K. Eckert, J. Prat, M. Tabbutt, V. Busti, M. Becker, N. MacCrann, H. Diehl, D. Tucker, E. Bertin, T. Jeltema, A. Drlica-Wagner, R. Gruendl, K. Bechtol, A.C. Rossell, T. Abbott, M. Aguena, J. Annis, D. Bacon, S. Bhargava, D. Brooks, D. Burke, M.C. Kind, J. Carretero, F. Castander, C. Conselice, M. Costanzi, L. da Costa, M. Pereira, J. De Vicente, J. DeRose, S. Desai, T. Eifler, A. Evrard, I. Ferrero, P. Fosalba, J. Frieman, J. García-Bellido, E. Gaztanaga, D. Gerdes, G. Gutierrez, S. Hinton, D. Hollowood, K. Honsc-

- heid, D. Huterer, D. James, S. Kent, E. Krause, K. Kuehn, O. Lahav, M. Lima, H. Lin, M. Maia, J. Marshall, P. Melchior, F. Menanteau, R. Miquel, J. Mohr, R. Morgan, J. Muir, R. Ogando, A. Palmese, F. Paz-Chinchón, A. Plazas, M. Rodriguez-Monroy, A. Romer, A. Roodman, E. Sanchez, V. Scarpine, S. Serrano, M. Smith, M. Soares-Santos, E. Suchyta, M. Swanson, G. Tarle, C. To, M. Troxel, T. Varga, J. Weller, R. Wilkinson, R. Wilkinson: Dark Energy Survey Year 3 Results: Measuring the Survey Transfer Function with Balrog. *Ap. J. Supp. Ser.* 258, 1 (2022).
- Fabian A., G. Ferland, J. Sanders, B. McNamara, C. Pinto, S. Walker: Hidden cooling flows in clusters of galaxies. *Mon. Not. R. Astron. Soc.* 515, 3, 3336-3345 (2022).
- Faerman Y., V. Pandya, R.S. Somerville, A. Sternberg: Exploring the Milky Way Circumgalactic Medium in a Cosmological Context with a Semianalytic Model. *Ap. J.* 928, 1 (2022).
- Feng S., H. Liu, P. Caselli, A. Burkhardt, F. Du, R. Bachiller, C. Codella, C. Ceccarelli: A Detailed Temperature Map of the Archetypal Protostellar Shocks in L1157. *Ap. J. Lett.* 933, 2 (2022).
- Feng Z., Z. Li, J. Shen, O. Gerhard, R. Saglia, M. Blaña: Large-scale Hydrodynamical Shocks as the Smoking-gun Evidence for a Bar in M31. *Ap. J.* 933, 2 (2022).
- Ferrer Asensio J., S. Spezzano, L. H. Coudert, V. Lattanzi, C. P. Endres, J. K. Jørgensen & P. Caselli: Millimetre and sub-millimetre spectroscopy of doubly deuterated acetaldehyde (CHD₂CHO) and first detection towards IRAS 16293-2422. *Astron. Astrophys.* 670, A177(2022).
- Ferrer Asensio J., S. Spezzano, P. Caselli, F.O. Alves, O. Sipilä, E. Redaelli, L. Bizzocchi, F. Lique & A. Mullins: Tracing the contraction of the pre-stellar core L1544 with HC170+ J = 1–0 emission. *Astron. Astrophys.* 667, A119 (2022).
- Filipović M.D., J. Payne, R. Alsaberi, R. Norris, P. Macgregor, L. Rudnick, B. Koribalski, D. Leahy, L. Ducci, R. Kothes, H. Andernach, L. Barnes, I. Bojčić, L. Bozzetto, R. Brose, J. Collier, E. Crawford, R. Crocker, S. Dai, T. Galvin, F. Haberl, U. Heber, T. Hill, A. Hopkins, N. Hurley-Walker, A. Ingallinera, T. Jarrett, P. Kavanagh, E. Lenc, K. Luken, D. Mackey, P. Manojlović, P. Maggi, C. Maitra, C. Pennock, S. Points, S. Riggi, G. Rowell, S. Safi-Harb, H. Sano, M. Sasaki, S. Shabala, J. Stevens, J.T. van Loon, N. Tothill, G. Umana, D. Urošević, V. Velović, T. Vernstrom, J. West, Z. Wan: Mysterious odd radio circle near the large magellanic cloud - an intergalactic supernova remnant?. *Mon. Not. R. Astron. Soc.* 512, 1, 265-284 (2022).
- Fontani F., A. Schmiedeke, A. Sánchez-Monge, L. Colzi, D. Elia, V. Rivilla, M. Beltrán, L. Bizzocchi, P. Caselli, L. Magrini, D. Romano: CHEMOUT: CHEMical complexity in star-forming regions of the OUTer Galaxy. II. Methanol formation at low metallicity. *Astron. Astrophys.* 664, A154 (2022).
- Fontani F., L. Colzi, L. Bizzocchi, V. Rivilla, D. Elia, M. Beltrán, P. Caselli, L. Magrini, A. Sánchez-Monge, L. Testi, D. Romano: CHEMOUT: CHEMical complexity in star-forming regions of the OUTer Galaxy. I. Organic molecules and tracers of star-formation activity. *Astron. Astrophys.* 660, A76 (2022).
- Francis L., N.v.d. Marel, D. Johnstone, E. Akiyama, S. Bruderer, R. Dong, J. Hashimoto, H.B. Liu, T. Muto, Y. Yang: Gap Opening and Inner Disk Structure in the Strongly Accreting Transition Disk of DM Tau. *Astron. J.* 164, 3 (2022).
- Franz R., B. Ercolano, S. Casassus, G. Picogna, T. Birnstiel, S. Pérez, C. Rab, A. Sharma: Dust entrainment in photoevaporative winds: Densities and imaging. *Astron. Astrophys.* 657, A69 (2022).
- Franz R., G. Picogna, B. Ercolano, S. Casassus, T. Birnstiel, C. Rab, S. Pérez: Dust entrainment in photoevaporative winds: Synthetic observations of transition disks. *Astron. Astrophys.* 659, A90 (2022).
- Freund S., S. Czesla, J. Robrade, P. Schneider, J. Schmitt: The stellar content of the ROSAT all-sky survey. *Astron. Astrophys.* 664, A105 (2022).
- Friedrich O., A. Halder, A. Boyle, C. Uhlemann, D. Britt, S. Codis, D. Gruen, C. Hahn: The PDF perspective on the tracer-matter connection: Lagrangian bias and non-Poissonian shot noise. *Mon. Not. R. Astron. Soc.* 510, 4 (2022).
- Fuhrmeister B., A. Zisik, P. Schneider, J. Robrade, J. Schmitt, P. Predehl, S. Czesla, K. France, A. García Muñoz: The high energy spectrum of Proxima Centauri simultaneously observed at X-ray and FUV wavelengths. *Astron. Astrophys.* 663, A119 (2022).
- Fukuchi H., K. Ichikawa, M. Akiyama, C. Ricci, S. Chon, M. Kokubo, A. Liu, T. Hashimoto, T. Izumi: H1821+643: The Most X-Ray and Infrared Luminous Active Galactic Nucleus (AGN) in the Swift/BAT Survey in the Process of Rapid Stellar and Supermassive Black Hole Mass Assembly. *Ap. J.* 940, 1 (2022).
- Galán-de Anta P.M., M. Sarzi, A. Pillepich, Y. Ding, L. Zhu, L. Coccato, E. Corsini, K. Fahrion, J. Falcón-Barroso, D. Gadotti, E. Iodice, M. Lyubenova, I. Martín-Navarro, R. McDermid, F. Pinna, G. van de Ven, P. de Zeeuw: The survival of stellar discs in Fornax-like environments, from TNG50 to real galaxies. *Mon. Not. R. Astron. Soc.* 517, 4 (2022).
- Galloway-Sprietsma M., Y.L. Shirley, J. Di Francesco, J. Keown, S. Scibelli, O. Sipilä, R. Smullen: A survey of deuterated ammonia in the Cepheus star-forming region L1251. *Mon. Not. R. Astron. Soc.* 515, 4, 5219-5234 (2022).
- García-Bernete I., D. Rigopoulou, A. Alonso-Herrero, F. Donnan, P. Roche, M. Pereira-Santaella, A. Labiano, L. Peralta de Arriba, T. Izumi, C. Ramos Almeida, T. Shimizu, S. Hönic, S. García-Burillo, D. Rosario, M. Ward, E. Bellocchi, E. Hicks, L. Fuller, C. Packham: A high angular resolution view of the PAH emission in Seyfert galaxies using JWST/MRS data. *Astron. Astrophys.* 666, L5 (2022).
- García-Senz D., R.M. Cabezón, J.A. Escartín: Conservative, density-based smoothed particle hydrodynamics with improved partition of the unity and better estimation of gradients. *Astron. Astrophys.* 659, A175 (2022).

- Garufi A., L. Podio, C. Codella, D. Segura-Cox, M. Vander Donckt, S. Mercimek, F. Bacciotti, D. Fedele, M. Kasper, J. Pineda, E. Humphreys, L. Testi: ALMA chemical survey of disk-outflow sources in Taurus (ALMA-DOT). VI. Accretion shocks in the disk of DG Tau and HL Tau. *Astron. Astrophys.* 658, A104 (2022).
- Garvin E.O., S. Kruk, C. Cornen, R. Bhatawdekar, R. Cañameras, B. Merín: Hubble Asteroid Hunter. II. Identifying strong gravitational lenses in HST images with crowdsourcing. *Astron. Astrophys.* 667, A141 (2022).
- Gasparyan S., D. Bégué, N. Sahakyan: Time-dependent lepto-hadronic modelling of the emission from blazar jets with SOPRANO: the case of TXS 0506 + 056, 3HSP J095507.9 + 355101, and 3C 279. *Mon. Not. R. Astron. Soc.* 509, 2 (2022).
- Gatti M., B. Jain, C. Chang, M. Raveri, D. Zürcher, L. Secco, L. Whiteway, N. Jeffrey, C. Doux, T. Kacprzak, D. Bacon, P. Fosalba, A. Alarcon, A. Amon, K. Bechtol, M. Becker, G. Bernstein, J. Blazek, A. Campos, A. Choi, C. Davis, J. Derose, S. Dodelson, F. Elsner, J. Elvin-Poole, S. Everett, A. Ferte, D. Gruen, I. Harrison, D. Huterer, M. Jarvis, E. Krause, P. Leget, P. Lemos, N. Maccrann, J. Mccullough, J. Muir, J. Myles, A. Navarro, S. Pandey, J. Prat, R. Rollins, A. Roodman, C. Sanchez, E. Sheldon, T. Shin, M. Troxel, I. Tutusaus, B. Yin, M. Agüena, S. Allam, F. Andrade-Oliveira, J. Annis, E. Bertin, D. Brooks, D. Burke, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, R. Cawthon, M. Costanzi, L. da Costa, M. Pereira, J. De Vicente, S. Desai, H. Diehl, J. Dietrich, P. Doel, A. Drlica-Wagner, K. Eckert, A. Evrard, I. Ferrero, J. García-Bellido, E. Gaztanaga, T. Giannantonio, R. Gruendl, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. James, K. Kuehn, N. Kuropatkin, O. Lahav, C. Lidman, M. Maia, J. Marshall, P. Melchior, F. Menanteau, R. Miquel, R. Morgan, A. Palmese, F. Paz-Chinchón, A. Pieres, A. Plazas Malagón, K. Reil, M. Rodriguez-Monroy, A. Romer, E. Sanchez, M. Schubnell, S. Serrano, I. Sevilla-Noarbe, M. Smith, M. Soares-Santos, E. Suchyta, G. Tarle, D. Thomas, C. To, T. Varga, DES Collaboration: Dark Energy Survey Year 3 results: Cosmology with moments of weak lensing mass maps. *Physical Review D* 106, 8 (2022).
- Gatti M., G. Giannini, G. Bernstein, A. Alarcon, J. Myles, A. Amon, R. Cawthon, M. Troxel, J. DeRose, S. Everett, A. Ross, E. Rykoff, J. Elvin-Poole, J. Cordero, I. Harrison, C. Sanchez, J. Prat, D. Gruen, H. Lin, M. Crocce, E. Roza, T. Abbott, M. Agüena, S. Allam, J. Annis, S. Avila, D. Bacon, E. Bertin, D. Brooks, D. Burke, A.C. Rosell, M.C. Kind, J. Carretero, F. Castander, A. Choi, C. Conselice, M. Costanzi, M. Crocce, L. da Costa, M. Pereira, K. Dawson, S. Desai, H. Diehl, K. Eckert, T. Eifler, A. Evrard, I. Ferrero, B. Flaugher, P. Fosalba, J. Frieman, J. García-Bellido, E. Gaztanaga, T. Giannantonio, R. Gruendl, J. Gschwend, S. Hinton, D. Hollowood, K. Honscheid, B. Hoyle, D. Huterer, D. James, K. Kuehn, N. Kuropatkin, O. Lahav, M. Lima, N. MacCrann, M. Maia, M. March, J. Marshall, P. Melchior, F. Menanteau, R. Miquel, J. Mohr, R. Morgan, R. Ogando, A. Palmese, F. Paz-Chinchón, W. Percival, A. Plazas, M. Rodriguez-Monroy, A. Roodman, G. Rossi, S. Samuroff, E. Sanchez, V. Scarpine, L. Secco, S. Serrano, I. Sevilla-Noarbe, M. Smith, M. Soares-Santos, E. Suchyta, M. Swanson, G. Tarle, D. Thomas, C. To, T. Varga, J. Weller, R. Wilkinson, R. Wilkinson, DES Collaboration: Dark Energy Survey Year 3 Results: clustering redshifts - calibration of the weak lensing source redshift distributions with redMaGiC and BOSS/eBOSS. *Mon. Not. R. Astron. Soc.* 510, 1 (2022).
- Gatti M., S. Pandey, E. Baxter, J. Hill, E. Moser, M. Raveri, X. Fang, J. DeRose, G. Giannini, C. Doux, H. Huang, N. Battaglia, A. Alarcon, A. Amon, M. Becker, A. Campos, C. Chang, R. Chen, A. Choi, K. Eckert, J. Elvin-Poole, S. Everett, A. Ferte, I. Harrison, N. Maccrann, J. Mccullough, J. Myles, A. Navarro Alsina, J. Prat, R. Rollins, C. Sanchez, T. Shin, M. Troxel, I. Tutusaus, B. Yin, T. Abbott, M. Agüena, S. Allam, F. Andrade-Oliveira, J. Annis, G. Bernstein, E. Bertin, B. Bolliet, J. Bond, D. Brooks, D. Burke, E. Calabrese, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, R. Cawthon, M. Costanzi, M. Crocce, L. da Costa, M. da Silva Pereira, J. De Vicente, S. Desai, H. Diehl, J. Dietrich, P. Doel, J. Dunkley, A. Evrard, S. Ferraro, I. Ferrero, B. Flaugher, P. Fosalba, J. Frieman, J. García-Bellido, E. Gaztanaga, D. Gerdes, T. Giannantonio, D. Gruen, R. Gruendl, J. Gschwend, G. Gutierrez, K. Herner, A. Hincks, S. Hinton, D. Hollowood, K. Honscheid, J. Hughes, D. Huterer, B. Jain, D. James, E. Krause, K. Kuehn, N. Kuropatkin, O. Lahav, C. Lidman, M. Lima, M. Lokken, M. Madhavacheril, M. Maia, J. Marshall, J. McMahon, P. Melchior, K. Moodley, J. Mohr, R. Morgan, F. Nati, M. Niemack, L. Page, A. Palmese, F. Paz-Chinchón, A. Pieres, A. Plazas Malagón, M. Rodriguez-Monroy, A. Romer, E. Sanchez, V. Scarpine, E. Schaan, L. Secco, S. Serrano, E. Sheldon, B. Sherwin, C. Sifón, M. Smith, M. Soares-Santos, D. Spergel, E. Suchyta, G. Tarle, D. Thomas, C. To, D. Tucker, T. Varga, J. Weller, R. Wilkinson, E. Wollack, Z. Xu, DES, ACT Collaboration: Cross-correlation of Dark Energy Survey Year 3 lensing data with ACT and Planck thermal Sunyaev-Zel'dovich effect observations. I. Measurements, systematics tests, and feedback model constraints. *Physical Review D* 105, 12 (2022).
- Gatuzz E., J. Sanders, K. Dennerl, C. Pinto, A. Fabian, T. Tamura, S. Walker, J. ZuHone: Measuring sloshing, merging, and feedback velocities in the Virgo cluster. *Mon. Not. R. Astron. Soc.* 511, 3 (2022).
- Gatuzz E., J. Sanders, R. Canning, K. Dennerl, A. Fabian, C. Pinto, H. Russell, T. Tamura, S. Walker, J. ZuHone: The velocity structure of the intracluster medium of the Centaurus cluster. *Mon. Not. R. Astron. Soc.* 513, 2, 1932-1946 (2022).
- Gavdush A., F. Kruczkiewicz, B. Giuliano, B. Müller, G. Komandin, T. Grassi, P. Theulé, K. Zaytsev, A. Ivlev, P. Caselli: Broadband spectroscopy of astrophysical ice analogues. II. Optical constants of CO and CO₂ ices in the terahertz and infrared ranges. *Astron. Astrophys.* 667, A49 (2022).
- Ge L., S. Paltani, D. Eckert, M. Salvato: Reconstructing AGN X-ray spectral parameter distributions with Bayesian methods. II. Population inference. *Astron. Astrophys.* 667, A153 (2022).
- Genzel R.: Nobel Lecture: A forty-year journey. *Reviews of Modern Physics* 94, 2 (2022).

- Ghirardini V., Y.E. Bahar, E. Bulbul, A. Liu, N. Clerc, F. Pacaud, J. Comparat, T. Liu, M.E. Ramos-Ceja, D. Hoang, J. Ider-Chitham, M. Klein, A. Merloni, K. Nandra, N. Ota, P. Predehl, T.H. Reiprich, J. Sanders, T. Schrabback: The eROSITA Final Equatorial-Depth Survey (eFEDS). Characterization of morphological properties of galaxy groups and clusters. *Astron. Astrophys.* 661, A12 (2022).
- Giers K., S. Spezzano, F. Alves, P. Caselli, E. Redaelli, O. Sipilä, M. Ben Khalifa, L. Wiesenfeld, S. Brünken, L. Bizzocchi: Deuteration of $\text{c-C}_3\text{H}_2$ towards the pre-stellar core L1544. *Astron. Astrophys.* 664, A119 (2022).
- Giles P., A. Robotham, M.E. Ramos-Ceja, B. Maughan, M. Sereno, S. McGee, S. Phillipps, A. Iovino, D. Turner, C. Adami, S. Brough, L. Chiappetti, S. Driver, A. Evrard, A. Farahi, F. Gastaldello, B. Holwerda, A. Hopkins, E. Koulouridis, F. Pacaud, M. Pierre, K. Pimblet: The XXL Survey. XLII. The $L_x - \sigma_v$ relation of galaxy groups and clusters detected in the XXL and GAMA surveys. *Mon. Not. R. Astron. Soc.* 511, 1, 1227-1246 (2022).
- Gilmore, G., ..., O. Gerhard et al.: The Gaia-ESO Public Spectroscopic Survey: Motivation, implementation, GRAFFE data processing, analysis, and final data products. *Astron. Astrophys.* 666, A120 (2022).
- Ginsburg A., V. Sokolov, M. de Val-Borro, E. Rosolowsky, J.E. Pineda, B.M. Sipőcz, J.D. Henshaw: Pyspeckit: A Spectroscopic Analysis and Plotting Package. *Astron. J.* 163, 6 (2022).
- Glowacki M., J.D. Collier, A. Kazemi-Moridani, B. Frank, H. Roberts, J. Darling, H. Klöckner, N. Adams, A.J. Baker, M. Bershad, T. Blecher, S. Blyth, R. Bowler, B. Catinella, L. Chemin, S.M. Crawford, C. Cress, R. Davé, R. Deane, E. de Blok, J. Delhaize, K. Duncan, E. Elson, S. February, E. Gawiser, P. Hatfield, J. Healy, P. Henning, K.M. Hess, I. Heywood, B.W. Holwerda, M. Hoosain, J.P. Hughes, Z.L. Hutchens, M. Jarvis, S. Kannappan, N. Katz, D. Kereš, M. Korsaga, R.C. Kraan-Korteweg, P. Lah, M. Lochner, N. Maddox, S. Makhathini, G.R. Meurer, M. Meyer, D. Obreschkow, S. Oh, T. Oosterloo, J. Oppor, H. Pan, D. Pisano, N. Randriamiarinarivo, S. Ravindranath, A.C. Schröder, R. Skelton, O. Smirnov, M. Smith, R.S. Somerville, R. Srianand, L. Staveley-Smith, M. Tanaka, M. Vaccari, W. van Driel, M. Verheijen, F. Walter, J.F. Wu, M.A. Zwaan: Looking at the Distant Universe with the MeerKAT Array: Discovery of a Luminous OH Megamaser at $z > 0.5$. *Ap. J. Lett.* 931, 1 (2022).
- Gobat R., C. D'Eugenio, D. Liu, G. Caminha, E. Daddi, D. Blázquez: The uncertain interstellar medium of high-redshift quiescent galaxies: Impact of methodology. *Astron. Astrophys.* 668, L4 (2022).
- Golden-Marx J.B., C. Miller, Y. Zhang, R. Ogando, A. Palmese, T. Abbott, M. Aguena, S. Allam, F. Andrade-Oliveira, J. Annis, D. Bacon, E. Bertin, D. Brooks, E. Buckley-Geer, A. Carnero Rosell, M. Carrasco Kind, F. Castander, M. Costanzi, M. Crocce, L. da Costa, M. Pereira, J. De Vicente, S. Desai, H. Diehl, P. Doel, A. Drlica-Wagner, S. Everett, A. Evrard, I. Ferrero, B. Flaugher, P. Fosalba, J. Frieman, J. García-Bellido, E. Gaztanaga, D. Gerdes, D. Gruen, R. Gruendl, J. Gschwend, G. Gutierrez, W. Hartley, S. Hinton, D. Hollowood, K. Honscheid, B. Hoyle, D. James, T. Jeltema, A. Kim, E. Krause, K. Kuehn, N. Kuropatkin, O. Lahav, M. Lima, M. Maia, J. Marshall, P. Melchior, F. Menanteau, R. Miquel, J. Mohr, R. Morgan, F. Paz-Chinchón, D. Petravick, A. Pieres, A. Plazas Malagón, J. Prat, A. Romer, E. Sanchez, B. Santiago, V. Scarpine, M. Schubnell, S. Serrano, I. Sevilla-Noarbe, M. Smith, M. Soares-Santos, E. Suchyta, G. Tarle, T. Varga: The Observed Evolution of the Stellar Mass-Halo Mass Relation for Brightest Central Galaxies. *Ap. J.* 928, 1 (2022).
- Grassi T., F. Nauman, J. Ramsey, S. Bovino, G. Picogna, B. Ercolano: Reducing the complexity of chemical networks via interpretable autoencoders. *Astron. Astrophys.* 668, A139 (2022).
- GRAVITY Collaboration, R. Abuter, N. Aymar, A. Amorim, J. Ball, M. Bauböck, J. Berger, H. Bonnet, G. Bourdarot, W. Brandner, V. Cardoso, Y. Clénet, Y. Dallilar, R. Davies, P. de Zeeuw, J. Dexter, A. Drescher, F. Eisenhauer, N. M. Förster Schreiber, A. Foschi, P. Garcia, F. Gao, E. Gendron, R. Genzel, S. Gillessen, M. Habibi, X. Haubois, G. Heißel, T. Henning, S. Hippler, M. Horrobin, L. Jochum, L. Jocou, A. Kaufer, P. Kervella, S. Lacour, V. Lapeyrère, J. Le Bouquin, P. Léna, D. Lutz, T. Ott, T. Paumard, K. Perraut, G. Perrin, O. Pfuhl, S. Rabien, J. Shangguan, T. Shimizu, S. Scheithauer, J. Stadler, A. Stephens, O. Straub, C. Straubmeier, E. Sturm, L. Tacconi, K. Tristram, F. Vincent, S. von Fellenberg, F. Widmann, E. Wieprecht, E. Wozorrek, J. Woillez, S. Yazici, A. Young: Mass distribution in the Galactic Center based on interferometric astrometry of multiple stellar orbits. *Astron. Astrophys.* 657, L12 (2022).
- GRAVITY Collaboration, R. Abuter, N. Aymar, A. Amorim, P. Arras, M. Bauböck, J. Berger, H. Bonnet, W. Brandner, G. Bourdarot, V. Cardoso, Y. Clénet, R. Davies, P. de Zeeuw, J. Dexter, Y. Dallilar, A. Drescher, F. Eisenhauer, T. Enßlin, N. M. Förster Schreiber, P. Garcia, F. Gao, E. Gendron, R. Genzel, S. Gillessen, M. Habibi, X. Haubois, G. Heißel, T. Henning, S. Hippler, M. Horrobin, A. Jiménez-Rosales, L. Jochum, L. Jocou, A. Kaufer, P. Kervella, S. Lacour, V. Lapeyrère, J. Le Bouquin, P. Léna, D. Lutz, F. Mang, M. Nowak, T. Ott, T. Paumard, K. Perraut, G. Perrin, O. Pfuhl, S. Rabien, J. Shangguan, T. Shimizu, S. Scheithauer, J. Stadler, O. Straub, C. Straubmeier, E. Sturm, L. Tacconi, K. Tristram, F. Vincent, S. von Fellenberg, I. Waisberg, F. Widmann, E. Wieprecht, E. Wozorrek, J. Woillez, S. Yazici, A. Young, G. Zins: Deep images of the Galactic center with GRAVITY. *Astron. Astrophys.* 657, A82 (2022).
- GRAVITY+ Collaboration, R. Abuter, F. Allouche, A. Amorim, C. Bailet, M. Bauböck, J. Berger, P. Berio, A. Bigioli, O. Boebion, M. Bolzer, H. Bonnet, G. Bourdarot, P. Bourget, W. Brandner, Y. Clénet, B. Courtney-Barrer, Y. Dallilar, R. Davies, D. Defrère, A. Delboulbé, F. Delplancke, R. Dembet, P. de Zeeuw, A. Drescher, A. Eckart, C. Édouard, F. Eisenhauer, M. Fabricius, H. Feuchtgruber, G. Finger, N. M. Förster Schreiber, E. Garcia, P. Garcia, F. Gao, E. Gendron, R. Genzel, J. Gil, S. Gillessen, T. Gomes, F. Gonté, C. Gouvret, P. Guajardo, S. Guieu, M. Hartl, X. Haubois, F. Haußmann, G. Heißel, T. Henning, S. Hippler, S. Hönig, M. Horrobin, N. Hubin, E. Jacqmart, L. Jochum, L. Jocou, A. Kaufer, P. Kervella, H. Korhonen, L. Kreidberg, S. Lacour, S. Lagarde, O. Lai, V. Lapeyrère, R. Lau-

- gier, J. Le Bouquin, J. Leftley, P. Léna, D. Lutz, F. Mang, A. Marcotto, D. Maurel, A. Mérand, F. Millour, N. More, H. Nowacki, M. Nowak, S. Oberti, T. Ott, L. Pallanca, L. Pasquini, T. Paumard, K. Perraut, G. Perrin, R. Petrov, O. Pfuhl, N. Pourré, S. Rabien, C. Rau, S. Robbe-Dubois, S. Rochat, M. Salman, M. Schöller, J. Schubert, N. Schuller, J. Shangguan, T. Shimizu, S. Scheithauer, A. Sevin, F. Soulez, A. Spang, E. Stadler, J. Stadler, C. Straubmeier, E. Sturm, L. Tacconi, K. Tristram, F. Vincent, S. von Fellenberg, S. Uysal, F. Widmann, E. Wieprecht, E. Wieszorrek, J. Woillez, S. Yazici, A. Young, G. Zins: First light for GRAVITY Wide. Large separation fringe tracking for the Very Large Telescope Interferometer. *Astron. Astrophys.* 665, A75 (2022).
- Green P.J., L. Pulgarin-Duque, S.F. Anderson, C.L. MacLeod, M. Eracleous, J.J. Ruan, J. Runnoe, M. Graham, B.R. Roulston, D.P. Schneider, A. Ahlf, D. Bizyaev, J.R. Brownstein, S.J. del Casal, S.A. Dodd, D. Hoover, C. Matt, A. Merloni, K. Pan, A. Ramirez, M. Ridder, S. Moseley: The Time Domain Spectroscopic Survey: Changing-look Quasar Candidates from Multi-epoch Spectroscopy in SDSS-IV. *Ap. J.* 933, 2 (2022).
- Greiner J., U. Hugentobler, J. Burgess, F. Berlato, M. Rott, A. Tsvetkova: A proposed network of gamma-ray burst detectors on the global navigation satellite system Galileo G2. *Astron. Astrophys.* 664, A131 (2022).
- Greiner J., U. Laux: A novel compact 4-channel beam splitter based on a Kösters-type prism. *CEAS Space Journal* 14, 2 (2022).
- Guadarrama R., E.I. Vorobyov, C. Rab, M. Güdel: The effect of metallicity on the abundances of molecules in protoplanetary disks. *Astron. Astrophys.* 667, A28 (2022).
- Guarini E., I. Tamborra, D. Bégué, T. Pitik, J. Greiner: Multi-messenger detection prospects of gamma-ray burst afterglows with optical jumps. *J. of Cosmology and Astroparticle Phys.* 2022, 6 (2022).
- Haberl F., C. Maitra, G. Vasilopoulos, P. Maggi, A. Udalski, I. Monageng, D. Buckley: Three new high-mass X-ray binaries in the Large Magellanic Cloud. *Astron. Astrophys.* 662, A22 (2022).
- Haberl F., C. Maitra, S. Carpano, X. Dai, V. Doroshenko, K. Dennerl, M. Freyberg, M. Sasaki, A. Udalski, K. Postnov, N. Shakura: eROSITA calibration and performance verification phase: High-mass X-ray binaries in the Magellanic Clouds. *Astron. Astrophys.* 661, A25 (2022).
- Haerendel, G., How energy enters the magnetosphere during a substorm: A perspective after 60 years of working in the field.. *Perspectives of Earth and Space Scientists*, 3, 1, (2022).
- Haerendel, G., My dealings with the aurora borealis. *Frontiers in Astronomy and Space Sciences*, 9, 10335421-5 (2022).
- Halder A., A. Barreira: Response approach to the integrated shear 3-point correlation function: the impact of baryonic effects on small scales. *Mon. Not. R. Astron. Soc.* 515, 3, 4639-4654 (2022).
- Hamaus N., M. Aubert, A. Pisani, S. Contarini, G. Verza, M. Cousinou, S. Escoffier, A. Hawken, G. Lavaux, G. Pollina, B. Wandelt, J. Weller, M. Bonici, C. Carbone, L. Guzzo, A. Kovacs, F. Marulli, E. Massara, L. Moscardini, P. Ntelis, W. Percival, S. Radinović, M. Sahlén, Z. Sakr, A. Sánchez, H. Winther, N. Auricchio, S. Awan, R. Bender, C. Bodendorf, D. Bonino, E. Branchini, M. Brescia, J. Brinchmann, V. Capobianco, J. Carretero, F. Castander, M. Castellano, S. Cavuoti, A. Cimatti, R. Cledassou, G. Congedo, L. Conversi, Y. Copin, L. Corcione, M. Cropper, A. Da Silva, H. Degaudenzi, M. Douspis, F. Dubath, C. Duncan, X. Dupac, S. Dusini, A. Ealet, S. Ferriol, P. Fosalba, M. Frailis, E. Franceschi, P. Franzetti, M. Fumana, B. Garilli, B. Gillis, C. Giocoli, A. Grazian, F. Grupp, S. Haugan, W. Holmes, F. Hormuth, K. Jahnke, S. Kermiche, A. Kiessling, M. Kilbinger, T. Kitching, M. Kümmel, M. Kunz, H. Kurki-Suonio, S. Ligori, P. Lilje, I. Lloro, E. Maiorano, O. Marggraf, K. Markovic, R. Massey, S. Maurogordato, M. Melchior, M. Meneghetti, G. Meylan, M. Moresco, E. Munari, S. Niemi, C. Padilla, S. Paltani, F. Pasian, K. Pedersen, V. Pettorino, S. Pires, M. Poncet, L. Popa, L. Pozzetti, R. Rebolo, J. Rhodes, H. Rix, M. Roncarelli, E. Rossetti, R. Saglia, P. Schneider, A. Secroun, G. Seidel, S. Serrano, C. Sirignano, G. Sirri, J. Starck, P. Tallada-Crespí, D. Tavagnacco, A. Taylor, I. Tereno, R. Toledo-Moreo, F. Torradeflot, E. Valentijn, L. Valenziano, Y. Wang, N. Welikala, G. Zamorani, J. Zoubian, S. Andreon, M. Baldi, S. Camera, S. Mei, C. Neissner, E. Romelli: Euclid: Forecasts from redshift-space distortions and the Alcock-Paczynski test with cosmic voids. *Astron. Astrophys.* 658, A20 (2022).
- Hampel, J., S. Komossa, J. Greiner, T.H. Reiprich, M. Freyberg, & T. Erben: A new X-Ray tidal disruption event candidate with fast variability. *Res. in Astron. & Astrophys.* 22, 5 (2022).
- Hartke J., M. Arnaboldi, O. Gerhard, L. Coccato, M. Merrifield, K. Kuijken, C. Pulsoni, A. Agnello, S. Bhattacharya, C. Spiniello, A. Cortesi, K. Freeman, N. Napolitano, A. Romanowsky: The halo of M 105 and its group environment as traced by planetary nebula populations. II. Using kinematics of single stars to unveil the presence of intra-group light around the Leo I galaxies NGC 3384 and M 105. *Astron. Astrophys.* 663, A12 (2022).
- Hartley W., A. Choi, A. Amon, R. Gruendl, E. Sheldon, I. Harrison, G. Bernstein, I. Sevilla-Noarbe, B. Yanny, K. Eckert, H. Diehl, A. Alarcon, M. Banerji, K. Bechtol, R. Buchs, S. Cantu, C. Conselice, J. Cordero, C. Davis, T. Davis, S. Dodelson, A. Drlica-Wagner, S. Everett, A. Ferté, D. Gruen, K. Honscheid, M. Jarvis, M. Johnson, N. Kokron, N. MacCrann, J. Myles, A. Pace, A. Palmese, F. Paz-Chinchón, M. Pereira, A. Plazas, J. Prat, M. Rodriguez-Monroy, E. Rykoff, S. Samuroff, C. Sánchez, L. Secco, F. Tarsitano, A. Tong, M. Troxel, Z. Vasquez, K. Wang, C. Zhou, T. Abbott, M. Aguena, S. Allam, J. Annis, D. Bacon, E. Bertin, S. Bhargava, D. Brooks, D. Burke, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, F. Castander, M. Costanzi, M. Crocce, L. da Costa, J. De Vicente, J. DeRose, S. Desai, J. Dietrich, T. Eifler, J. Elvin-Poole, I. Ferrero, B. Flaugher, P. Fosalba, J. García-Bellido, E. Gaztanaga, D. Gerdes, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, D. Hueter, D. James, S. Kent, E. Krause, K. Kuehn, N. Kuropat-

- kin, O. Lahav, H. Lin, M. Maia, M. March, J. Marshall, P. Martini, P. Melchior, F. Menanteau, R. Miquel, J. Mohr, R. Morgan, E. Neilsen, R. Ogando, S. Pandey, A. Romer, A. Roodman, M. Sako, E. Sanchez, V. Scarpine, S. Serrano, M. Smith, M. Soares-Santos, E. Suchyta, M. Swanson, G. Tarle, D. Thomas, C. To, T. Varga, A. Walker, W. Wester, R. Wilkinson, J. Zuntz, J. Zuntz, DES Collaboration: Dark Energy Survey Year 3 Results: Deep Field optical + near-infrared images and catalogue. *Mon. Not. R. Astron. Soc.* 509, 3 (2022).
- Hashimoto T., T. Goto, B.H. Chen, S.C. Ho, T.Y. Hsiao, Y.H.V. Wong, A.Y. On, S.J. Kim, E. Kilerci-Eser, K. Huang, D.J.D. Santos, S. Yamasaki: Energy functions of fast radio bursts derived from the first CHIME/FRB catalogue. *Mon. Not. R. Astron. Soc.* 511, 2 (2022).
- Hashimoto Y., H. Böhringer, K. Umetsu: Dwarf galaxy luminosity functions and cluster environments. *Mon. Not. R. Astron. Soc.* 511, 2 (2022).
- Heigl S., E. Hoemann, A. Burkert: Taking off the edge - simultaneous filament and end core formation. *Mon. Not. R. Astron. Soc.* 517, 4, 5272-5280 (2022).
- Heilmann R.K., A.R. Bruccoleri, V. Burwitz, C. DeRoo, A. Garner, H.M. Günther, E.M. Gullikson, G. Hartner, E. Hertz, A. Langmeier, T. G. Müller, S. Rukdee, T. Schmidt, R.K. Smith, M.L. Schattenburg: X-Ray Performance of Critical-angle Transmission Grating Prototypes for the Arcus Mission. *Ap. J.* 934, 2 (2022).
- Henríquez-Brocal K., R. Herrera-Camus, L. Tacconi, R. Genzel, A. Bolatto, S. Bovino, R. Demarco, N. M. Förster Schreiber, M. Lee, D. Lutz, M. Rubio: Molecular gas properties of Q1700-MD94: A massive main-sequence galaxy at $z \approx 2$. *Astron. Astrophys.* 657, L15 (2022).
- Herrera-Camus R., N. M. Förster Schreiber, S. Price, H. Übler, A. Bolatto, R. Davies, D. Fisher, R. Genzel, D. Lutz, T. Naab, A. Nestor, T. Shimizu, A. Sternberg, L. Tacconi, K. Tadaki: Kiloparsec view of a typical star-forming galaxy when the Universe was ~ 1 Gyr old. II. Regular rotating disk and evidence for baryon dominance on galactic scales. *Astron. Astrophys.* 665, L8 (2022).
- Herrero, V. J., M. Jiménez Redondo, R.J. Peláez, B. Maté, & I. Tanarro: Structure and evolution of interstellar carbonaceous dust. Insights from the laboratory. *Frontiers in Astronomy and Space Sciences*, 9 (2022).
- Hinkle J.T., T.W. Holoiien, B.J. Shappee, J.M. Neustadt, K. Auchettl, P.J. Valley, M. Shahbandeh, M. Kluge, C.S. Kochanek, K. Stanek, M.E. Huber, R.S. Post, D. Bersier, C. Ashall, M.A. Tucker, J.P. Williams, T. de Jaeger, A. Do, M. Fausnaugh, D. Gruen, U. Hopp, J. Myles, C. Obermeier, A.V. Payne, T.A. Thompson: The Curious Case of ASASSN-20hx: A Slowly Evolving, UV- and X-Ray-Luminous, Ambiguous Nuclear Transient. *Ap. J.* 930, 1 (2022).
- Ho A.Y., D.A. Perley, Y. Yao, D. Svinkin, A. de Ugarte Postigo, R. Perley, D.A. Kann, E. Burns, I. Andreoni, E.C. Bellm, E. Bissaldi, J.S. Bloom, T.G. Brink, R. Dekany, A.J. Drake, J.F. Agüí Fernández, A.V. Filippenko, D. Frederiks, M.J. Graham, B.A. Hristov, M.M. Kasliwal, S. Kulkarni, H. Kumar, R.R. Laher, A.L. Lysenko, B. Mailyan, C. Malacaria, A. Miller, S. Poolakkil, R. Riddle, A. Ridnaia, B. Rusholme, V. Savchenko, J. Sollerman, C. Thöne, A. Tsvetkova, M. Ulanov, A. von Kienlin: Cosmological Fast Optical Transients with the Zwicky Transient Facility: A Search for Dirty Fireballs. *Ap. J.* 938, 1 (2022).
- Ho W.C., L. Kuiper, C.M. Espinoza, S. Guillot, P.S. Ray, D. Smith, S. Bogdanov, D. Antonopoulou, Z. Arzoumanian, M. Bejger, T. Enoto, P. Esposito, A.K. Harding, B. Haskell, N. Lewandowska, C. Maitra, G. Vasilopoulos: Timing Six Energetic Rotation-powered X-Ray Pulsars, Including the Fast-spinning Young PSR J0058-7218 and Big Glitcher PSR J0537-6910. *Ap. J.* 939, 1 (2022).
- Hoyer S., A. Bonfanti, A. Leleu, L. Acuña, L. Serrano, M. Deleuil, A. Bekkelien, C. Broeg, H. Florén, D. Queloz, T. Wilson, S. Sousa, M. Hooton, V. Adibekyan, Y. Alibert, R. Alonso, G. Anglada, J. Asquier, T. Bérczy, D. Barrado, S. Barros, W. Baumjohann, M. Beck, T. Beck, W. Benz, N. Bilot, F. Biondi, X. Bonfils, A. Brandeker, J. Cabrera, S. Charnoz, A. Collier Cameron, S. Csizmadia, M. Davies, L. Delrez, O. Demangeon, B. Demory, D. Ehrenreich, A. Erikson, A. Fortier, L. Fossati, M. Fridlund, D. Gandolfi, M. Gillon, M. Güdel, N. Hara, K. Heng, K. Isaak, J. Jenkins, L. Kiss, J. Laskar, D. Latham, A. Lecavelier des Etangs, M. Lendl, C. Lovis, A. Luntzer, D. Magrin, P. Maxted, V. Nascimbeni, G. Olofsson, R. Ottensamer, I. Pagano, E. Pallé, C. Persson, G. Peter, D. Piazza, G. Piotto, D. Pollacco, R. Ragazzoni, N. Rando, H. Rauer, I. Ribas, G. Ricker, S. Salmon, N. Santos, G. Scandariato, S. Seager, D. Ségransan, A. Simon, A. Smith, M. Steller, G.M. Szabó, N. Thomas, J. Twicken, S. Udry, V. Van Grootel, R. Vanderspek, N. Walton, K. Westendorff, J. Winn: Characterization of the HD 108236 system with CHEOPS and TESS Confirmation of a fifth transiting planet. *Astron. Astrophys.* 668, A117 (2022).
- Hsiao T.Y., T. Goto, T. Hashimoto, D.J.D. Santos, Y.H.V. Wong, S.J. Kim, B.J.R. Raquel, S.C. Ho, B. Chen, E. Kilerci, T. Lu, A.Y. On, Y. Lin, C.K. Wu: Constraining the Hubble constant and its lower limit from the proper motion of extragalactic radio jets. *Mon. Not. R. Astron. Soc.* 517, 1, 447-457 (2022).
- Hsu Y., Y. Lin, S. Huang, D. Nelson, V. Rodriguez-Gomez, H. Lai, J. Greene, A. Leauthaud, A. Aragón-Salamanca, K. Bundy, E. Emsellem, M. Merrifield, S. More, N. Okabe, Y. Rong, J.R. Brownstein, R.R. Lane, K. Pan, D.P. Schneider: SDSS-IV MaNGA: Cannibalism Caught in the Act-On the Frequency of Occurrence of Multiple Cores in Brightest Cluster Galaxies. *Ap. J.* 933, 1 (2022).
- Hu C., A. Schruha, A. Sternberg, E.F. van Dishoeck: Dependence of X_{CO} on Metallicity, Intensity, and Spatial Scale in a Self-regulated Interstellar Medium. *Ap. J.* 931, 1 (2022).
- Huang J., C. Ginski, M. Benisty, B. Ren, A.J. Bohn, É. Choquet, K.I. Öberg, Á. Ribas, J. Bae, E.A. Bergin, T. Birnstiel, Y. Boehler, S. Facchini, D. Harsono, M. Hogerheijde, F. Long, C.F. Manara, F. Ménard, P. Pinilla, C. Pinte, C. Rab, J.P. Williams, A. Zurlo: Disk Evolution Study through Imaging of Nearby Young Stars (DESTINYs): A Panchromatic View of DO Tau's Complex Kilo-astronomical-unit Environment. *Ap. J.* 930, 2 (2022).

- Iljenkarevic J., T. Reiprich, F. Pacaud, A. Veronica, B. Whelan, J. Aschersleben, K. Migkas, E. Bulbul, J. Sanders, M.E. Ramos-Ceja, T. Liu, V. Ghirardini, A. Liu, T. Boller: eROSITA spectro-imaging analysis of the Abell 3408 galaxy cluster. *Astron. Astrophys.* 661, A26 (2022).
- Imai M., Y. Oya, B. Svoboda, H.B. Liu, B. Lefloch, S. Viti, Y. Zhang, C. Ceccarelli, C. Codella, C.J. Chandler, N. Sakai, Y. Aikawa, F.O. Alves, N. Balucani, E. Bianchi, M. Bouvier, G. Busquet, P. Caselli, E. Caux, S. Charnley, S. Choudhury, N. Cuello, M.D. Simone, F. Dulieu, A. Durán, L. Evans, C. Favre, D. Fedele, S. Feng, F. Fontani, L. Francis, T. Hama, T. Hanawa, E. Herbst, S. Hirano, T. Hirota, A. Isella, I. Jiménez-Serra, D. Johnstone, C. Kahane, R. Le Gal, L. Loinard, A. López-Sepulcre, L.T. Maud, M.J. Maureira, F. Menard, S. Mercimek, A. Miotello, G. Moellenbrock, S. Mori, N.M. Murillo, R. Nakatani, H. Nomura, Y. Oba, R. O'Donoghue, S. Ohashi, Y. Okoda, J. Ospina-Zamudio, J. Pineda, L. Podio, A. Rimola, T. Sakai, D. Segura-Cox, Y. Shirley, V. Taquet, L. Testi, C. Vastel, N. Watanabe, Y. Watanabe, A. Witzel, C. Xue, B. Zhao, S. Yamamoto: Chemical and Physical Characterization of the Isolated Protostellar Source CB68: FAUST IV. *Ap. J.* 934, 1 (2022).
- Izquierdo A.F., S. Facchini, G.P. Rosotti, E.F. van Dishoeck, L. Testi: A New Planet Candidate Detected in a Dust Gap of the Disk around HD 163296 through Localized Kinematic Signatures: An Observational Validation of the DISCMINER. *Ap. J.* 928, 1 (2022).
- Jiao S., J. Wu, H. Ruan, Y. Lin, C. Tsai, L. Feng: Can Turbulent, High-density Gas Form Stars in Molecular Clouds: A Case Study in Ophiuchus. *Research in Astron. and Astrophys.* 22, 7 (2022).
- Jiao S., Y. Lin, X. Shui, J. Wu, Z. Ren, D. Li: J-comb: An image fusion algorithm to combine observations covering different spatial frequency ranges. *Science China Physics, Mechanics, and Astronomy* 65, 9 (2022).
- Jiménez Redondo, M., I. Tanarro, & V.J. Herrero: Time evolution of neutral and charged species in Ar/C₂H₂ capacitively-coupled RF discharges. *Plasma Sources Science and Technology* 31, 6 (2022).
- Jin S., E. Daddi, G.E. Magdis, D. Liu, J.R. Weaver, Q. Tan, F. Valentino, Y. Gao, E. Schinnerer, A. Calabrò, Q. Gu, D.B. Sese: Diagnosing deceptively cold dusty galaxies at $3.5 < z < 6$: A substantial population of compact starbursts with high infrared optical depths. *Astron. Astrophys.* 665, A3 (2022).
- Juneau S., A.D. Goulding, J. Banfield, S. Bianchi, P. Duc, I. Ho, M.A. Dopita, J. Scharwächter, F.E. Bauer, B. Groves, D.M. Alexander, R.L. Davies, D. Elbaz, E. Freeland, E. Hampton, L.J. Kewley, R. Nikutta, P. Shastri, X. Shu, F.P. Vogt, T. Wang, O.I. Wong, J. Woo: The Black Hole-Galaxy Connection: Interplay between Feedback, Obscuration, and Host Galaxy Substructure. *Ap. J.* 925, 2 (2022).
- Kalvāns J., K. Silsbee: Icy molecule desorption in interstellar grain collisions. *Mon. Not. R. Astron. Soc.* 515, 1, 785-794 (2022).
- Kauffmann G., C. Maraston, J. Comparat, P. Crowther: A study of 1000 galaxies with unusually young and massive stars in the SDSS: a search for hidden black holes. *Mon. Not. R. Astron. Soc.* 513, 1, 1063-1077 (2022).
- Kauffmann O., O. Ilbert, J. Weaver, H. McCracken, B. Milvang-Jensen, G. Brammer, I. Davidzon, O. Le Fèvre, D. Liu, B. Mobasher, A. Moneti, M. Shuntov, S. Toft, C. Casey, J. Dunlop, J. Kartaltepe, A. Koekemoer, D. Sanders, L. Tresse: COSMOS2020: UV-selected galaxies at $z \geq 7.5$. *Astron. Astrophys.* 667, A65 (2022).
- Kavanagh P., M. Sasaki, M. Filipović, S. Points, L. Bozzetto, F. Haberl, P. Maggi, C. Maitra: New XMM-Newton observations of faint, evolved supernova remnants in the Large Magellanic Cloud. *Mon. Not. R. Astron. Soc.* 515, 3, 4099-4129 (2022).
- Kawamuro T., C. Ricci, M. Imanishi, R.F. Mushotzky, T. Izumi, F. Ricci, F.E. Bauer, M.J. Koss, B. Trakhtenbrot, K. Ichikawa, A.F. Rojas, K.L. Smith, T. Shimizu, K. Oh, J.S. den Brok, S. Baba, M. Baloković, C. Chang, D. Kakkad, R.W. Pfeifle, G.C. Privon, M.J. Temple, Y. Ueda, F. Harrison, M.C. Powell, D. Stern, M. Urry, D.B. Sanders: BASS XXXII: Studying the Nuclear Millimeter-wave Continuum Emission of AGNs with ALMA at Scales ≤ 100 -200 pc. *Ap. J.* 938, 1 (2022).
- Kawana Y., T. Saito, S.K. Okumura, R. Kawabe, D. Espada, D. Iono, H. Kaneko, M.M. Lee, T. Michiyama, K. Motohara, K. Nakanishi, A.R. Pettitt, Z. Randriamanakoto, J. Ueda, T. Yamashita: Multiwavelength and Multi-CO View of the Minor Merger Driven Star Formation in the Nearby LIRG NGC 3110. *Ap. J.* 929, 1 (2022).
- Keel W.C., J. Tate, O.I. Wong, J.K. Banfield, C.J. Lintott, K.L. Masters, B.D. Simmons, C. Scarlata, C. Cardamone, R. Smethurst, L. Fortson, J. Shanahan, S. Kruk, I.L. Garland, C. Hancock, D. O'Ryan: Gems of the Galaxy Zoo: A Wide-ranging Hubble Space Telescope Gap-filler Program. *Astron. J.* 163, 4 (2022).
- Keihänen E., V. Lindholm, P. Monaco, L. Blot, C. Carbone, K. Kiiveri, A. Sánchez, A. Viitanen, J. Valiviita, A. Amara, N. Auricchio, M. Baldi, D. Bonino, E. Branchini, M. Brescia, J. Brinchmann, S. Camera, V. Capobianco, J. Carretero, M. Castellano, S. Cavuoti, A. Cimatti, R. Cledassou, G. Congedo, L. Conversi, Y. Copin, L. Corcione, M. Cropper, A. Da Silva, H. Degaudenzi, M. Douspis, F. Dubath, C. Duncan, X. Dupac, S. Dusini, A. Ealet, S. Farrens, S. Ferriol, M. Frai-lis, E. Franceschi, M. Fumana, B. Gillis, C. Giocoli, A. Grazian, F. Grupp, L. Guzzo, S. Haugan, H. Hoekstra, W. Holmes, F. Hormuth, K. Jahnke, M. Kümmel, S. Kermiche, A. Kiessling, T. Kitching, M. Kunz, H. Kurki-Suonio, S. Ligorì, P. Lilje, I. Lloro, E. Maiorano, O. Mansutti, O. Marggraf, F. Marulli, R. Massey, M. Melchior, M. Meneghetti, G. Meylan, M. Moresco, B. Morin, L. Moscardini, E. Munari, S. Niemi, C. Padilla, S. Paltani, F. Pasian, K. Pedersen, V. Pettorino, S. Pires, G. Polenta, M. Poncet, L. Popa, F. Raison, A. Renzi, J. Rhodes, E. Romelli, R. Saglia, B. Sartoris, P. Schneider, T. Schrabback, A. Secroun, G. Seidel, C. Sirignano, G. Sirri, L. Stanco, C. Surace, P. Tallada-Crespí, D. Tavagnacco, A. Taylor, I. Tereno, R. Toledo-Moreo, F. Torradeflot, E. Valentijn, L. Valenziano, T. Vassallo, Y. Wang, J. Weller, G. Zamorani, J. Zoubian, S. Andreon, D. Maino, S. de la Torre: Euclid: Fast two-point correlation

- function covariance through linear construction. *Astron. Astrophys.* 666, A129 (2022).
- Khoperskov S., O. Gerhard: Chemo-kinematics of the Milky Way spiral arms and bar resonances: Connection to ridges and moving groups in the solar vicinity. *Astron. Astrophys.* 663, A38 (2022).
- Kim J., M. Chevance, J.D. Kruijssen, A.K. Leroy, A. Schrubba, A.T. Barnes, F. Bigiel, G.A. Blanc, Y. Cao, E. Congiu, D.A. Dale, C.M. Faesi, S.C. Glover, K. Grasha, B. Groves, A. Hughes, R.S. Klessen, K. Kreckel, R. McElroy, H. Pan, J. Pety, M. Querejeta, A. Razza, E. Rosolowsky, T. Saito, E. Schinnerer, J. Sun, N. Tomičić, A. Usero, T.G. Williams: Environmental dependence of the molecular cloud lifecycle in 54 main-sequence galaxies. *Mon. Not. R. Astron. Soc.* 516, 2, 3006-3028 (2022).
- Kim, J.-G., M. Gong, C.-G. Kim, & E.C. Ostriker: Photochemistry and heating/cooling of the multiphase interstellar medium with UV radiative transfer for magneto-hydrodynamic simulations. *The Astrophysical Journal Supplement Series* 264, 1 (2022).
- Kim S., C.W. Lee, M. Tafalla, M. Gophinathan, P. Caselli, P.C. Myers, E.J. Chung, S. Li: The Role of Filamentary Structures in the Formation of Two Dense Cores, L1544 and L694-2. *Ap. J.* 940, 2 (2022).
- Klein M., M. Oguri, J. Mohr, S. Grandis, V. Ghirardini, T. Liu, A. Liu, E. Bulbul, J. Wolf, J. Comparat, M. E. Ramos-Ceja, J. Buchner, I. Chiu, N. Clerc, A. Merloni, H. Miyatake, S. Miyazaki, N. Okabe, N. Ota, F. Pacaud, M. Salvato, S. Driver: The eROSITA Final Equatorial-Depth Survey (eFEDS). Optical confirmation, redshifts, and properties of the cluster and group catalog. *Astron. Astrophys.* 661, A4 (2022).
- Klingler N., O. Kargaltsev, G.G. Pavlov, C. Ng, Z. Gong, J. Hare: "The Goose" Pulsar Wind Nebula of PSR J1016-5857: The Birth of a Plerion. *Ap. J.* 932, 2 (2022).
- Knödseder J., W. Collmar, M. Jarry, M. McConnell: COMPTEL data analysis using GammaLib and ctools. *Astron. Astrophys.* 665, A84 (2022).
- Kokorev V., G. Brammer, S. Fujimoto, K. Kohno, G. Magdis, F. Valentino, S. Toft, P. Oesch, I. Davidzon, F. Bauer, D. Coe, E. Egami, M. Oguri, M. Ouchi, M. Postman, J. Richard, J. Jolly, K. Knudsen, F. Sun, J. Weaver, Y. Ao, A. Baker, L. Bradley, K. Caputi, M. Dessauges-Zavadsky, D. Espada, B. Hatsukade, A. Koekemoer, A. Muñoz Arancibia, K. Shimasaku, H. Umehata, T. Wang, W. Wang: ALMA Lensing Cluster Survey: Hubble Space Telescope and Spitzer Photometry of 33 Lensed Fields Built with CHArGE. *Ap. J. Supp. Ser.* 263, 2 (2022).
- König O., J. Wilms, R. Arcodia, T. Dauser, K. Dennerl, V. Doroshenko, F. Haberl, S. Hämmerich, C. Kirsch, I. Kreykenbohm, M. Lorenz, A. Malyali, A. Merloni, A. Rau, T. Rauch, G. Sala, A. Schwöpe, V. Suleimanov, P. Weber, K. Werner: X-ray detection of a nova in the fireball phase. *Nature* 605, 7909 (2022).
- König O., R. Saxton, P. Kretschmar, L. Angelini, G. Belanger, P. Evans, M. Freyberg, V. Savchenko, I. Traulsen, J. Wilms: HILIGT, Upper Limit Servers II - Implementing the data servers. *Astronomy and Computing* 38 (2022).
- Koss M.J., B. Trakhtenbrot, C. Ricci, F.E. Bauer, E. Treister, R. Mushotzky, C.M. Urry, T.T. Ananna, M. Baloković, J.S. den Brok, S.B. Cenke, F. Harrison, K. Ichikawa, I. Lamperti, A. Lein, J.E. Mejía-Restrepo, K. Oh, F. Pacucci, R.W. Pfeifle, M.C. Powell, G.C. Privon, F. Ricci, M. Salvato, K. Schawinski, T. Shimizu, K.L. Smith, D. Stern: BASS. XXI. The Data Release 2 Overview. *Ap. J. Supp. Ser.* 261, 1 (2022).
- Koss M.J., C. Ricci, B. Trakhtenbrot, K. Oh, J.S. den Brok, J.E. Mejía-Restrepo, D. Stern, G.C. Privon, E. Treister, M.C. Powell, R. Mushotzky, F.E. Bauer, T.T. Ananna, M. Baloković, R.E. Bär, G. Becker, P. Bessiere, L. Burtscher, T. Caglar, E. Congiu, P. Evans, F. Harrison, M. Heida, K. Ichikawa, N. Kamraj, I. Lamperti, F. Pacucci, F. Ricci, R. Riffel, A.F. Rojas, K. Schawinski, M.J. Temple, C.M. Urry, S. Veilleux, J. Williams: BASS. XXII. The BASS DR2 AGN Catalog and Data. *Ap. J. Supp. Ser.* 261, 1 (2022).
- Kovács A., N. Jeffrey, M. Gatti, C. Chang, L. Whiteway, N. Hamaus, O. Lahav, G. Pollina, D. Bacon, T. Kacprzak, B. Mawdsley, S. Nadathur, D. Zeurcher, J. García-Bellido, A. Alarcon, A. Amon, K. Bechtol, G. Bernstein, A. Campos, A. Carnero Rosell, M. Carrasco Kind, R. Cawthon, R. Chen, A. Choi, J. Cordero, C. Davis, J. DeRose, C. Doux, A. Drlica-Wagner, K. Eckert, F. Elsner, J. Elvin-Poole, S. Everett, A. Ferté, G. Giannini, D. Gruen, R. Gruendl, I. Harrison, W. Hartley, K. Herner, E. Huff, D. Huterer, N. Kuropatkin, M. Jarvis, P. Leget, N. MacCrann, J. McCullough, J. Muir, J. Myles, A. Navarro-Alsina, S. Pandey, J. Prat, M. Raveri, R. Rollins, A. Ross, E. Rykoff, C. Sánchez, L. Secco, I. Sevilla-Noarbe, E. Sheldon, T. Shin, M. Troxel, I. Tutusaus, T. Varga, B. Yanny, B. Yin, Y. Zhang, J. Zuntz, M. Aguena, S. Allam, F. Andrade-Oliveira, J. Annis, E. Bertin, D. Brooks, D. Burke, J. Carretero, M. Costanzi, L. da Costa, M. Pereira, T. Davis, J. De Vicente, S. Desai, H. Diehl, I. Ferrero, B. Flaugher, P. Fosalba, J. Frieman, E. Gaztañaga, D. Gerdes, T. Giannantonio, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. James, K. Kuehn, M. Lima, M. Maia, J. Marshall, P. Melchior, F. Menanteau, R. Miquel, R. Morgan, R. Ogando, F. Paz-Chinchon, A. Pieres, A. Plazas, M.R. Monroy, K. Romer, A. Roodman, E. Sanchez, M. Schubnell, S. Serrano, M. Smith, M. Soares-Santos, E. Suchyta, M. Swanson, G. Tarle, D. Thomas, C. To, J. Weller: The DES view of the Eridanus supervoid and the CMB cold spot. *Mon. Not. R. Astron. Soc.* 510, 1 (2022).
- Kovács A., P. Vielzeuf, I. Ferrero, P. Fosalba, U. Demirbozan, R. Miquel, C. Chang, N. Hamaus, G. Pollina, K. Bechtol, M. Becker, A. Carnero Rosell, M. Carrasco Kind, R. Cawthon, M. Crocce, A. Drlica-Wagner, J. Elvin-Poole, M. Gatti, G. Giannini, R. Gruendl, A. Porredon, A. Ross, E. Rykoff, I. Sevilla-Noarbe, E. Sheldon, B. Yanny, T. Abbott, M. Aguena, S. Allam, J. Annis, D. Bacon, G. Bernstein, E. Bertin, S. Bocquet, D. Brooks, D. Burke, J. Carretero, F. Castander, M. Costanzi, L. da Costa, M. Pereira, J. De Vicente, S. Desai, H. Diehl, J. Dietrich, A. Ferté, B. Flaugher, J. Frieman, J. Garcia-Bellido, E. Gaztañaga, D. Gerdes, T. Giannantonio, D. Gruen, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. Huterer, K. Kuehn, O. Lahav, M. Lima, M. March, J. Marshall, P. Melchior, F.

- Menanteau, R. Morgan, J. Muir, R. Ogando, A. Palmese, F. Paz-Chinchon, A. Pieres, A. Plazas Malagón, M. Rodríguez Monroy, A. Roodman, E. Sanchez, M. Schubnell, S. Serrano, M. Smith, E. Suchyta, G. Tarle, D. Thomas, C. To, T. Varga, J. Weller, DES Collaboration: Dark Energy Survey Year 3 results: Imprints of cosmic voids and superclusters in the Planck CMB lensing map. *Mon. Not. R. Astron. Soc.* 515, 3, 4417-4429 (2022).
- Kruk S., P. García Martín, M. Popescu, B. Merín, M. Mahlike, B. Carry, R. Thomson, S. Karadağ, J. Durán, E. Racero, F. Giordano, D. Baines, G. de Marchi, R. Laureijs: Hubble Asteroid Hunter. I. Identifying asteroid trails in Hubble Space Telescope images. *Astron. Astrophys.* 661, A85 (2022).
- Kunzweiler F., B. Biltzinger, J. Greiner, J. Burgess: Automatic detection of long-duration transients in Fermi-GBM data. *Astron. Astrophys.* 665, A112 (2022).
- Lahén N., T. Naab, P.H. Johansson, B. Elmegreen, C. Hu, S. Walch, U.P. Steinwandel, B.P. Moster: Erratum: "The GRIFFIN Project-Formation of Star Clusters with Individual Massive Stars in a Simulated Dwarf Galaxy Starburst" (2020, *ApJ*, 891, 2). *Ap. J.* 934, 1 (2022).
- Laloux, B., A. Georgakakis, C. Andonie, D.M. Alexander, A. Ruiz, D.J. Rosario, J. Aird, J. Buchner, F. J. Carrera, A. Lapi, C.R. Almeida, M. Salvato, & F. Shankar: The demographics of obscured AGN from X-ray spectroscopy guided by multiwavelength information. *Mon. Not. R. Astron. Soc.* 518, 2, 2546-2566 (2022).
- Lara-López M., P. Galán-de Anta, M. Sarzi, E. Iodice, T. Davis, N. Zabel, E. Corsini, P. de Zeeuw, K. Fahrion, J. Falcón-Barroso, D. Gadotti, R. McDermid, F. Pinna, V. Rodríguez-Gomez, G. van de Ven, L. Zhu, L. Coccatto, M. Lyubenova, I. Martín-Navarro: The Fornax3D project: The environmental impact on gas metallicity gradients in Fornax cluster galaxies. *Astron. Astrophys.* 660, A105 (2022).
- Laseter I.H., S.L. Finkelstein, M.J. Bagley, D.M. Davis, K. Gebhardt, C. Gronwall, R. Ciardullo, G.R. Zeimann, E.M. Cooper, D. Farrow: A Search for Lensed Ly α Emitters within the Early HETDEX Data Set. *Ap. J.* 940, 1 (2022).
- Leauthaud A., A. Amon, S. Singh, D. Gruen, J. Lange, S. Huang, N. Robertson, T. Varga, Y. Luo, C. Heymans, H. Hildebrandt, C. Blake, M. Aguena, S. Allam, F. Andrade-Oliveira, J. Annis, E. Bertin, S. Bhargava, J. Blazek, S. Bridle, D. Brooks, D. Burke, A.C. Rosell, M. Carrasco Kind, J. Carretero, F. Castander, R. Cawthon, A. Choi, M. Costanzi, L. da Costa, M. Pereira, C. Davis, J. De Vicente, J. DeRose, H. Diehl, J. Dietrich, P. Doel, K. Eckert, S. Everett, A. Evrard, I. Ferrero, B. Flaugher, P. Fosalba, J. García-Bellido, M. Gatti, E. Gaztanaga, R. Gruendl, J. Gschwend, W. Hartley, D. Hollowood, K. Honscheid, B. Jain, D. James, M. Jarvis, B. Joachimi, A. Kannawadi, A. Kim, E. Krause, K. Kuehn, K. Kuijken, N. Kuropatkin, M. Lima, N. MacCrann, M. Maia, M. Makler, M. March, J. Marshall, P. Melchior, F. Menanteau, R. Miquel, H. Miyatake, J. Mohr, B. Moraes, S. More, M. Surhud, R. Morgan, J. Myles, R. Ogando, A. Palmese, F. Paz-Chinchón, A.P. Malagón, J. Prat, M. Rau, J. Rhodes, M. Rodríguez-Monroy, A. Roodman, A. Ross, S. Samuroff, C. Sánchez, E. Sanchez, V. Scarpine, D. Schlegel, M. Schubnell, S. Serrano, I. Sevilla-Noarbe, C. Sifón, M. Smith, J. Speagle, E. Suchyta, G. Tarle, D. Thomas, J. Tinker, C. To, M. Troxel, L. Van Waerbeke, P. Vielzeuf, A. Wright: Lensing without borders - I. A blind comparison of the amplitude of galaxy-galaxy lensing between independent imaging surveys. *Mon. Not. R. Astron. Soc.* 510, 4 (2022).
- Lee J.C., B.C. Whitmore, D.A. Thilker, S. Deger, K.L. Larson, L. Ubeda, G.S. Anand, M. Boquien, R. Chandar, D.A. Dale, E. Emsellem, A.K. Leroy, E. Rosolowsky, E. Schinnerer, J. Schmidt, J. Lilly, J. Turner, S. Van Dyk, R.L. White, A.T. Barnes, F. Belfiore, F. Bigiel, G.A. Blanc, Y. Cao, M. Chevance, E. Congiu, O.V. Egorov, S.C. Glover, K. Graha, B. Groves, J.D. Henshaw, A. Hughes, R.S. Klessen, E. Koch, K. Kreckel, J.D. Kruijssen, D. Liu, L.A. Lopez, N. Mayker, S.E. Meidt, E.J. Murphy, H. Pan, J. Pety, M. Querejeta, A. Razza, T. Saito, P. Sánchez-Blázquez, F. Santoro, A. Sardone, F. Scheuermann, A. Schrubba, J. Sun, A. Usoro, E. Watkins, T.G. Williams: The PHANGS-HST Survey: Physics at High Angular Resolution in Nearby Galaxies with the Hubble Space Telescope. *Ap. J. Supp. Ser.* 258, 1 (2022).
- Lee S., E. Huff, A. Choi, J. Elvin-Poole, C. Hirata, K. Honscheid, N. MacCrann, A. Ross, M. Troxel, T. Eifler, H. Kong, A. Ferté, J. Blazek, D. Huterer, A. Amara, A. Campos, A. Chen, S. Dodelson, P. Lemos, C. Leonard, V. Miranda, J. Muir, M. Raveri, L. Secco, N. Weaverdyck, J. Zuntz, S. Bridle, C. Davis, J. DeRose, M. Gatti, J. Prat, M. Rau, S. Samuroff, C. Sánchez, P. Vielzeuf, M. Aguena, S. Allam, A. Amon, F. Andrade-Oliveira, G. Bernstein, E. Bertin, D. Brooks, D. Burke, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, F. Castander, R. Cawthon, C. Conselice, M. Costanzi, L. da Costa, M. Pereira, J. De Vicente, S. Desai, H. Diehl, J. Dietrich, P. Doel, S. Everett, A. Evrard, I. Ferrero, P. Fosalba, J. Frieman, J. García-Bellido, E. Gaztanaga, D. Gerdes, T. Giannantonio, D. Gruen, R. Gruendl, J. Gschwend, G. Gutierrez, W. Hartley, S. Hinton, D. Hollowood, B. Hoyle, D. James, K. Kuehn, N. Kuropatkin, O. Lahav, M. Lima, M. Maia, M. March, J. Marshall, F. Menanteau, R. Miquel, J. Mohr, R. Morgan, A. Palmese, F. Paz-Chinchón, A. Pieres, A.P. Malagón, A. Roodman, E. Sanchez, V. Scarpine, M. Schubnell, S. Serrano, I. Sevilla-Noarbe, E. Sheldon, M. Smith, E. Suchyta, M. Swanson, G. Tarle, D. Thomas, C. To, T. Varga, J. Weller, J. Weller, DES Collaboration: Probing gravity with the DES-CMASS sample and BOSS spectroscopy. *Mon. Not. R. Astron. Soc.* 509, 4, 4982-4996 (2022).
- Lee S., M. Troxel, A. Choi, J. Elvin-Poole, C. Hirata, K. Honscheid, E. Huff, N. MacCrann, A. Ross, T. Eifler, C. Chang, R. Miquel, Y. Omori, J. Prat, G. Bernstein, C. Davis, J. DeRose, M. Gatti, M. Rau, S. Samuroff, C. Sánchez, P. Vielzeuf, J. Zuntz, M. Aguena, S. Allam, A. Amon, F. Andrade-Oliveira, E. Bertin, D. Brooks, D. Burke, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, F. Castander, R. Cawthon, C. Conselice, M. Costanzi, L. da Costa, M. Pereira, J. De Vicente, S. Desai, H. Diehl, J. Dietrich, P. Doel, S. Everett, A. Evrard, I. Ferrero, B. Flaugher, P. Fosalba, J. Frieman, J. García-Bellido, E. Gaztanaga, D. Gerdes, T. Giannantonio, D. Gruen, R. Gruendl, J. Gschwend, G.

- Gutierrez, W. Hartley, S. Hinton, D. Hollowood, B. Hoyle, D. Huterer, D. James, K. Kuehn, N. Kuropatkin, O. Lahav, M. Lima, M. Maia, M. March, J. Marshall, F. Menanteau, J. Mohr, R. Morgan, A. Palmese, F. Paz-Chinchón, A. Pieres, A. Plazas Malagón, A. Roodman, E. Sanchez, V. Scarpine, M. Schubnell, S. Serrano, I. Sevilla-Noarbe, E. Sheldon, M. Smith, E. Suchyta, M. Swanson, G. Tarle, D. Thomas, C. To, T. Varga, J. Weller, J. Weller, DES Collaboration: Galaxy-galaxy lensing with the DES-CMASS catalogue: measurement and constraints on the galaxy-matter cross-correlation. *Mon. Not. R. Astron. Soc.* 509, 2 (2022).
- Leemker M., A. Booth, E. F. van Dishoeck, A. Pérez-Sánchez, J. Szulágyi, A. Bosman, S. Bruderer, S. Facchini, M. Hogerheijde, T. Paneque-Carreño, J. Sturm: Gas temperature structure across transition disk cavities. *Astron. Astrophys.* 663, A23 (2022).
- Lemos P., N. Weaverdyck, R. Rollins, J. Muir, A. Ferté, A. Liddle, A. Campos, D. Huterer, M. Raveri, J. Zuntz, E. Di Valentino, X. Fang, W. Hartley, M. Aguena, S. Allam, J. Annis, E. Bertin, S. Bocquet, D. Brooks, D. Burke, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, F. Castander, A. Choi, M. Costanzi, M. Crocce, L. da Costa, M. Pereira, J. Dietrich, S. Everett, I. Ferrero, J. Frieman, J. García-Bellido, M. Gatti, E. Gaztanaga, D. Gerdes, D. Gruen, R. Gruendl, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. James, K. Kuehn, N. Kuropatkin, M. Lima, M. March, P. Melchior, F. Menanteau, R. Miquel, R. Morgan, A. Palmese, F. Paz-Chinchón, A. Pieres, A.P. Malagón, A. Porredon, E. Sanchez, V. Scarpine, M. Schubnell, S. Serrano, I. Sevilla-Noarbe, M. Smith, E. Suchyta, M. Swanson, G. Tarle, D. Thomas, C. To, T. Varga, J. Weller, DES Collaboration: Robust sampling for weak lensing and clustering analyses with the dark energy survey. *Mon. Not. R. Astron. Soc.* 521, 1, p.1184-1199 (2022).
- Lepore M., A. Bongiorno, P. Tozzi, A. Travascio, L. Zapacosta, E. Merlin, R. Fassbender: Mass assembly and active galactic nucleus activity at $z \geq 1.5$ in the dense environment of XDCP J0044.0-2033. *Astron. Astrophys.* 668, A123 (2022).
- Leroy A.K., E. Rosolowsky, A. Usero, K. Sandstrom, E. Schinnerer, A. Schrubba, A.D. Bolatto, J. Sun, A.T. Barnes, F. Belfiore, F. Bigiel, J.S. den Brok, Y. Cao, I. Chiang, M. Chevance, D.A. Dale, C. Eibensteiner, C.M. Faesi, S.C. Glover, A. Hughes, M.J. Jiménez Donaire, R.S. Klessen, E.W. Koch, J.D. Kruijssen, D. Liu, S.E. Meidt, H. Pan, J. Pety, J. Puschnig, M. Querejeta, T. Saito, A. Sardone, E.J. Watkins, A. Weiss, T.G. Williams: Low-J CO Line Ratios from Single-dish CO Mapping Surveys and PHANGS-ALMA. *Ap. J.* 927, 2 (2022).
- Leung S., T. Siebert: Gamma-ray light curves and spectra of classical novae. *Mon. Not. R. Astron. Soc.* 516, 1, 1008-1021 (2022).
- Li B., Y. Zhang, T. Liu, R. Liu, X. Wang: Prospect of detecting X-ray haloes around middle-aged pulsars with eROSITA. *Mon. Not. R. Astron. Soc.* 513, 2, 2884-2892 (2022).
- Li, F., J. Wang, F. Gao, S. Liu, Z.-Y. Zhang, S. Li, Y. Gong, J. Li, & Y. Shi: Dense gas in local galaxies revealed by multiple tracers. *Mon. Not. R. Astron. Soc.* 503, 3, 4508-4528 (2022).
- Li J., J. Wang, X. Lu, V. Ilyushin, R.A. Motiyenko, Q. Gou, E.A. Alekseev, D. Quan, L. Margulès, F. Gao, F.J. Lovas, Y. Wu, E. Bergin, S. Li, Z. Shen, F. Du, M. Li, S. Zheng, X. Zheng: Erratum: "Propionamide ($C_2H_5CONH_2$): The Largest Peptide-like Molecule in Space" (2021, *ApJ*, 919, 4). *Ap. J.* 931, 2 (2022).
- Li Z., J. Shen, O. Gerhard, J.P. Clarke: Gas Dynamics in the Galaxy: Total Mass Distribution and the Bar Pattern Speed. *Ap. J.* 925, 1 (2022).
- Lin Y., S. Spezzano, O. Sipilä, A. Vasyunin, P. Caselli: Multiline observations of CH_3OH , $c-C_3H_2$, and HNC toward L1544. Dissecting the core structure with chemical differentiation. *Astron. Astrophys.* 665, A131 (2022).
- Linke, L., P. Simon, P. Schneider, D.J. Farrow, J. Rödiger, & A.H. Wright: KiDS plus VIKING plus GAMA: Halo occupation distributions and correlations of satellite numbers with a new halo model of the galaxy-matter bispectrum for galaxy-galaxy-galaxy lensing. *Astron. Astrophys.* 665, A38 (2022).
- Liu A., E. Bulbul, V. Ghirardini, T. Liu, M. Klein, N. Clerc, Y. Özsoy, M. E. Ramos-Ceja, F. Pacaud, J. Comparat, N. Okabe, Y. Bahar, V. Biffi, H. Brunner, M. Brüggen, J. Buchner, J. Ider Chitham, I. Chiu, K. Dolag, E. Gattuzz, J. Gonzalez, D. Hoang, G. Lamer, A. Merloni, K. Nandra, M. Oguri, N. Ota, P. Predehl, T. Reiprich, M. Salvato, T. Schrabback, J. Sanders, R. Seppi, Q. Thibaud: The eROSITA Final Equatorial-Depth Survey (eFEDS). Catalog of galaxy clusters and groups. *Astron. Astrophys.* 661, A2 (2022).
- Liu C., K. Gebhardt, E.M. Cooper, D. Davis, D.P. Schneider, R. Ciardullo, D.J. Farrow, S.L. Finkelstein, C. Gronwall, Y. Guo, G.J. Hill, L. House, D. Jeong, S. Jogee, W. Kollatschny, M. Krumpe, M. Landriau, O.A. Chavez Ortiz, Y. Zhang, HETDEX Collaboration: The Active Galactic Nuclei in the Hobby-Eberly Telescope Dark Energy Experiment Survey (HETDEX). I. Sample Selection. *Ap. J. Supp. Ser.* 261, 2 (2022).
- Liu C., K. Gebhardt, E.M. Cooper, Y. Zhang, D.P. Schneider, R. Ciardullo, D. Davis, D.J. Farrow, S.L. Finkelstein, C. Gronwall, G.J. Hill, L. House, D. Jeong, W. Kollatschny, M.L. Niemeyer, S. Tuttle, HETDEX Collaboration: The Active Galactic Nuclei in the Hobby-Eberly Telescope Dark Energy Experiment Survey (HETDEX). II. Luminosity Function. *Ap. J.* 935, 2 (2022).
- Liu C., K. Gebhardt, W. Kollatschny, R. Ciardullo, E.M. Cooper, D. Davis, D.J. Farrow, S.L. Finkelstein, E. Gawiser, C. Gronwall, G.J. Hill, L. House, D.P. Schneider, T. Urrutia, G.R. Zeimann: The Active Galactic Nuclei in the Hobby-Eberly Telescope Dark Energy Experiment Survey (HETDEX). III. A Red Quasar with Extremely High Equivalent Widths Showing Powerful Outflows. *Ap. J.* 940, 1 (2022).
- Liu, M.-X., H. Tong, Y.-M. Hu, M.-L. Chan, Z. Liu, H. Sun, & M. Hendry: Following up the afterglow: strategy for X-ray observation triggered by gravitational wave events. *Res. Astron. Astrophys.* 21, 12 (2022).

- Liu R., Y.C. Liu, J. Huang, Z. Huang, B. Klecker, C. Wang: Density Compressions at Magnetic Switchbacks Associated With Fast Plasma: A Superposed Epoch Analysis. *J. Geophys. Res. (Space Phys.)* 127, 5 (2022).
- Liu T., A. Merloni, J. Comparat, K. Nandra, J. Sanders, G. Lamer, J. Buchner, T. Dwelly, M. Freyberg, A. Malyali, A. Georgakakis, M. Salvato, H. Brunner, M. Brusa, M. Klein, V. Ghirardini, N. Clerc, F. Pacaud, E. Bulbul, A. Liu, A. Schwobe, J. Robrade, J. Wilms, T. Dauser, M.E. Ramos-Ceja, T.H. Reiprich, T. Boller, J. Wolf: Establishing the X-ray source detection strategy for eROSITA with simulations. *Astron. Astrophys.* 661, A27 (2022).
- Liu T., A. Merloni, J. Wolf, M. Salvato, T.H. Reiprich, J. Comparat, R. Arcodia, G. Lamer, A. Georgakakis, T. Dwelly, J. Sanders, J. Buchner, F. Haberl, M.E. Ramos-Ceja, J. Wilms, K. Nandra, H. Brunner, M. Brusa, A. Schwobe, J. Robrade, M. Freyberg, T. Boller, C. Maitra, A. Veronica, A. Malyali: The eROSITA extragalactic CalPV serendipitous catalog. *Astron. Astrophys.* 664, A126 (2022).
- Liu T., J. Buchner, K. Nandra, A. Merloni, T. Dwelly, J.S. Sanders, M. Salvato, R. Arcodia, M. Brusa, J. Wolf, A. Georgakakis, T. Boller, M. Krumpe, G. Lamer, S. Waddell, T. Urrutia, A. Schwobe, J. Robrade, J. Wilms, T. Dauser, J. Comparat, Y. Toba, K. Ichikawa, K. Iwasawa, Y. Shen, H.I. Medel: The eROSITA Final Equatorial-Depth Survey (eFEDS). The AGN catalog and its X-ray spectral properties. *Astron. Astrophys.* 661, A5 (2022).
- Liu Y., G.H. Bertrang, M. Flock, G.P. Rosotti, E.F. van Dishoeck, Y. Boehler, S. Facchini, C. Cui, S. Wolf, M. Fang: Millimeter gap contrast as a probe for turbulence level in protoplanetary disks. *Science China Physics, Mechanics, and Astronomy* 65, 12 (2022).
- Locatelli N., G. Ponti, S. Bianchi: disnht: Modeling X-ray absorption from distributed column densities. *Astron. Astrophys.* 659, A118 (2022).
- Lokken M., R. Hložek, A.v. Engelen, M. Madhavacheril, E. Baxter, J. DeRose, C. Doux, S. Pandey, E. Rykoff, G. Stein, C. To, T. Abbott, S. Adhikari, M. Agüena, S. Allam, F. Andrade-Oliveira, J. Annis, N. Battaglia, G. Bernstein, E. Bertin, J. Bond, D. Brooks, E. Calabrese, A.C. Rosell, M.C. Kind, J. Carretero, R. Cawthon, A. Choi, M. Costanzi, M. Crocce, L.d. Costa, M.d.S. Pereira, J.D. Vicente, S. Desai, J. Dietrich, P. Doel, J. Dunkley, S. Everett, A. Evrard, S. Ferraro, B. Flaugher, P. Fosalba, J. Frieman, P. Gallardo, J. García-Bellido, E. Gaztanaga, D. Gerdes, T. Giannantonio, D. Gruen, R. Gruendl, J. Gschwend, G. Gutierrez, J. Hill, M. Hilton, A. Hincks, S. Hinton, D. Hollowood, K. Honscheid, B. Hoyle, Z. Huang, J. Hughes, D. Huterer, B. Jain, D. James, T. Jeltema, K. Kuehn, M. Lima, M. Maia, J. Marshall, J. McMahon, P. Melchior, F. Menanteau, R. Miquel, J. Mohr, K. Moodley, R. Morgan, F. Nati, L. Page, R. Ogando, A. Palmese, F. Paz-Chinchón, A.P. Malagón, A. Pieres, A. Romer, E. Roza, E. Sanchez, V. Scarpine, A. Schillaci, M. Schubnell, S. Serrano, I. Sevilla-Noarbe, E. Sheldon, T. Shin, C. Sifón, M. Smith, M. Soares-Santos, E. Suchyta, M. Swanson, G. Tarle, D. Thomas, D. Tucker, T. Varga, J. Weller, R. Wechsler, R. Wilkinson, E. Wollack, Z. Xu: Superclustering with the Atacama Cosmology Telescope and Dark Energy Survey. I. Evidence for Thermal Energy Anisotropy Using Oriented Stacking. *Ap. J.* 933, 2 (2022).
- Lopez B., S. Lagarde, R. Petrov, W. Jaffe, P. Antonelli, F. Allouche, P. Berio, A. Matter, A. Meiland, F. Millour, S. Robbe-Dubois, T. Henning, G. Weigelt, A. Glindemann, T. Agocs, C. Bailet, U. Beckmann, F. Bettonvil, R. van Boekel, P. Bourget, Y. Bresson, P. Bristow, P. Cruzalèbes, E. Eldswijk, Y. Fantei Caujolle, J. González Herrera, U. Graser, P. Guajardo, M. Heininger, K. Hofmann, G. Kroes, W. Laun, M. Lehmitz, C. Leinert, K. Meisenheimer, S. Morel, U. Neumann, C. Paladini, I. Percheron, M. Riquelme, M. Schoeller, P. Stee, L. Venema, J. Woillez, G. Zins, P. Ábrahám, S. Abadie, R. Abuter, M. Accardo, T. Adler, J. Alonso, J. Augereau, A. Böhm, G. Bazin, J. Beltran, A. Bensberg, W. Boland, R. Brast, L. Burtscher, R. Castillo, A. Chelli, C. Cid, J. Clausse, C. Connot, R. Conzelmann, W. Danchi, M. Delbo, J. Drevon, C. Dominik, A. van Duin, M. Ebert, F. Eisenhauer, S. Flament, R. Frahm, V. Gámez Rosas, A. Gabasch, A. Gallenne, E. Garces, P. Girard, A. Glazenberg, F. Gonté, F. Guitton, M. de Haan, H. Hanenburg, X. Haubois, V. Hocié, M. Hogerheijde, R. ter Horst, J. Hron, C. Hummel, N. Hubin, R. Huerta, J. Idserda, J. Isbell, D. Ives, G. Jakob, A. Jaskó, L. Jochum, L. Klarmann, R. Klein, J. Kragt, S. Kuindersma, E. Kokoulina, L. Labadie, S. Lacour, J. Leftley, R. Le Poole, J. Lizon, M. Lopez, F. Lykou, A. Mérand, A. Marcotto, N. Mauclert, T. Maurer, L. Mehrgan, J. Meisner, K. Meixner, M. Mellein, J. Menut, L. Mohr, L. Mosoni, R. Navarro, E. Nußbaum, L. Pallanca, E. Pantin, L. Pasquini, T. Phan Duc, J. Pott, E. Pozna, A. Richichi, A. Ridinger, F. Rigal, T. Rivinius, R. Roelfsema, R. Rohloff, S. Rousseau, D. Salabert, D. Schertl, N. Schuhler, M. Schuil, K. Shabun, A. Soullain, C. Stephan, P. Toledo, K. Tristram, N. Tromp, F. Vakili, J. Varga, J. Vinther, L. Waters, M. Wittkowski, S. Wolf, F. Wrhel, G. Yoffe: MATISSE, the VLTI mid-infrared imaging spectro-interferometer. *Astron. Astrophys.* 659, A192 (2022).
- Loureiro A., L. Whittaker, A. Spurio Mancini, B. Joachimi, A. Cuceu, M. Asgari, B. Stölzner, T. Tröster, A. Wright, M. Bilicki, A. Dvornik, B. Giblin, C. Heymans, H. Hildebrandt, H. Shan, A. Amara, N. Auricchio, C. Bodendorf, D. Bonino, E. Branchini, M. Brescia, V. Capobianco, C. Carbone, J. Carretero, M. Castellano, S. Cavuoti, A. Cimatti, R. Cle-dassou, G. Congedo, L. Conversi, Y. Copin, L. Corcione, M. Cropper, A. Da Silva, M. Douspis, F. Dubath, C. Duncan, X. Dupac, S. Dusini, S. Farrens, S. Ferriol, P. Fosalba, M. Frailis, E. Franceschi, M. Fumana, B. Garilli, B. Gillis, C. Giocoli, A. Grazian, F. Grupp, S. Haugan, W. Holmes, F. Hormuth, K. Jahnke, M. Kümmel, S. Kermiche, A. Kiessling, M. Kilbinger, T. Kitching, K. Kuijken, M. Kunz, H. Kurki-Suonio, S. Ligi, P. Lilje, I. Lloro, O. Mansutti, O. Marggraf, K. Markovic, F. Marulli, R. Massey, M. Meneghetti, G. Meylan, M. Moresco, B. Morin, L. Moscardini, E. Munari, S. Niemi, C. Padilla, S. Paltani, F. Pasian, K. Pedersen, V. Pettorino, S. Pires, M. Poncet, L. Popa, F. Raison, J. Rhodes, H. Rix, M. Roncarelli, R. Saglia, P. Schneider, A. Secroun, S. Serrano, C. Sirignano, G. Sirri, L. Stanco, J. Starck, P. Tallada-Crespí, A. Taylor, I. Tereno, R. Toledo-Moreo, F. Torradeflot, E. Valentijn, Y. Wang, N. Welikala, J. Weller, G. Zamorani, J. Zoubian, S. Andreon,

- M. Baldi, S. Camera, R. Farinelli, G. Polenta, N. Tessore: KiDS and Euclid: Cosmological implications of a pseudo angular power spectrum analysis of KiDS-1000 cosmic shear tomography. *Astron. Astrophys.* 665, A56 (2022).
- Lu T., T. Goto, T. Hashimoto, D.J.D. Santos, Y.H.V. Wong, S.J. Kim, T.Y. Hsiao, E. Kilerci, S.C. Ho, T. Nagao, Y. Matsuoka, M. Onoue, Y. Toba, Shellqs Collaboration: Subaru High-z Exploration of Low-Luminosity Quasars (SHELLQs) - XV. Constraining the cosmic reionization at $5.5 < z < 7$. *Mon. Not. R. Astron. Soc.* 517, 1, 1264-1281 (2022).
- Lu X., G. Li, Q. Zhang, Y. Lin: A massive Keplerian protostellar disk with flyby-induced spirals in the Central Molecular Zone. *Nature Astronomy* 6, 837-843 (2022).
- MacCrann N., M. Becker, J. McCullough, A. Amon, D. Gruen, M. Jarvis, A. Choi, M. Troxel, E. Sheldon, B. Yanny, K. Herner, S. Dodelson, J. Zuntz, K. Eckert, R. Rollins, T. Varga, G. Bernstein, R. Gruendl, I. Harrison, W. Hartley, I. Sevilla-Noarbe, A. Pieres, S. Bridle, J. Myles, A. Alarcon, S. Everett, C. Sánchez, E. Huff, F. Tarsitano, M. Gatti, L. Secco, T. Abbott, M. Aguena, S. Allam, J. Annis, D. Bacon, E. Bertin, D. Brooks, D. Burke, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, M. Costanzi, M. Crocce, M. Pereira, J. De Vicente, S. Desai, H. Diehl, J. Dietrich, P. Doel, T. Eifler, I. Ferrero, A. Ferté, B. Flaugher, P. Fosalba, J. Frieman, J. García-Bellido, E. Gaztanaga, D. Gerdes, T. Giannantonio, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. James, O. Lahav, M. Lima, M. Maia, M. March, J. Marshall, P. Martini, P. Melchior, F. Menanteau, R. Miquel, J. Mohr, R. Morgan, J. Muir, R. Ogando, A. Palmese, F. Paz-Chinchón, A. Plazas, M. Rodriguez-Monroy, A. Roodman, S. Samuroff, E. Sanchez, V. Scarpine, S. Serrano, M. Smith, M. Soares-Santos, E. Suchyta, M. Swanson, G. Tarle, D. Thomas, C. To, R. Wilkinson, R. Wilkinson, DES Collaboration: Dark Energy Survey Y3 results: blending shear and redshift biases in image simulations. *Mon. Not. R. Astron. Soc.* 509, 3 (2022).
- Magaudda E., B. Stelzer, S. Raetz, A. Klutsch, M. Salvato, J. Wolf: First eROSITA study of nearby M dwarfs and the rotation-activity relation in combination with TESS. *Astron. Astrophys.* 661, A29 (2022).
- Maitra C., F. Haberl, M. Sasaki, P. Maggi, K. Dennerl, M. Freyberg: SN 1987A: Tracing the flux decline and spectral evolution through a comparison of SRG/eROSITA and XMM-Newton observations. *Astron. Astrophys.* 661, A30 (2022).
- Maitra C., F. Haberl: Discovery of four super-soft X-ray sources in XMM-Newton observations of the Large Magellanic Cloud. *Astron. Astrophys.* 657, A26 (2022).
- Mao, J., J.S. Kaastra, M. Mehdipour, G.A. Kriss, Y. Wang, S. Grafton-Waters, G. Branduardi-Raymont, C. Pinto, H. Landt, D.J. Walton, E. Costantini, L.D. Gesu, S. Bianchi, P.-O. Petrucci, B.D. Marco, G. Ponti, Y. Fukazawa, J. Ebrero, & E. Behar: Transient obscuration event captured in NGC 3227 - III. Photoionization modeling of the X-ray obscuration event in 2019. *Astron. Astrophys.* 665, A72 (2022).
- Marchesi S., X. Zhao, N. Torres-Albà, M. Ajello, M. Gaspari, A. Pizzetti, J. Buchner, E. Bertola, A. Comastri, A. Feltré, R. Gilli, G. Lanzuisi, G. Matzeu, F. Pozzi, F. Salvestrini, D. Sengupta, R. Silver, F. Tombesi, A. Traina, C. Vignali, L. Zappacosta: Compton-thick AGN in the NuSTAR Era. VIII. A joint NuSTAR-XMM-Newton Monitoring of the Changing-look Compton-thick AGN NGC 1358. *Ap. J.* 935, 2 (2022).
- Mau S., E. Nadler, R. Wechsler, A. Drlica-Wagner, K. Bechtol, G. Green, D. Huterer, T. Li, Y. Mao, C. Martínez-Vázquez, M. McNanna, B. Mutlu-Pakdil, A. Pace, A. Peter, A. Riley, L. Strigari, M. Wang, M. Aguena, S. Allam, J. Annis, D. Bacon, E. Bertin, S. Bocquet, D. Brooks, D. Burke, A.C. Rosell, M.C. Kind, J. Carretero, M. Costanzi, M. Crocce, M. Pereira, T. Davis, J.D. Vicente, S. Desai, P. Doel, I. Ferrero, B. Flaugher, J. Frieman, J. García-Bellido, M. Gatti, G. Giannini, D. Gruen, R. Gruendl, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. James, K. Kuehn, O. Lahav, M. Maia, J. Marshall, R. Miquel, J. Mohr, R. Morgan, R. Ogando, F. Paz-Chinchón, A. Pieres, M. Rodriguez-Monroy, E. Sanchez, V. Scarpine, S. Serrano, I. Sevilla-Noarbe, E. Suchyta, G. Tarle, C. To, D. Tucker, J. Weller, DES Collaboration: Milky Way Satellite Census. IV. Constraints on Decaying Dark Matter from Observations of Milky Way Satellite Galaxies. *Ap. J.* 932, 2 (2022).
- Maureira M.J., M. Gong, J.E. Pineda, H.B. Liu, K. Silsbee, P. Caselli, J. Zamponi, D.M. Segura-Cox, A. Schmiedeke: Dust Hot Spots at 10 au Scales around the Class 0 Binary IRAS 16293-2422 A: A Departure from the Passive Irradiation Model. *Ap. J. Lett.* 941, 2 (2022).
- Maxted P., D. Ehrenreich, T. Wilson, Y. Alibert, A.C. Cameron, S. Hoyer, S. Sousa, G. Olofsson, A. Bekkelien, A. Deline, L. Delrez, A. Bonfanti, L. Borsato, R. Alonso, G. Anglada Escudé, D. Barrado, S. Barros, W. Baumjohann, M. Beck, T. Beck, W. Benz, N. Billot, F. Biondi, X. Bonfils, A. Brandeker, C. Broeg, T. Bárczy, J. Cabrera, S. Charnoz, C. Corral Van Damme, S. Csizmadia, M. Davies, M. Deleuil, O. Demangeon, B. Demory, A. Erikson, H. Florén, A. Fortier, L. Fossati, M. Fridlund, D. Futyan, D. Gandolfi, M. Gillon, M. Guedel, P. Guterman, K. Heng, K. Isaak, L. Kiss, J. Laskar, A. Lecavelier des Etangs, M. Lendl, C. Lovis, D. Magrin, V. Nascimbeni, R. Ottensamer, I. Pagano, E. Pallé, G. Peter, G. Piotto, D. Pollacco, F. Pozuelos, D. Queloz, R. Ragazzoni, N. Rando, H. Rauer, C. Reimers, I. Ribas, S. Salmon, N. Santos, G. Scandariato, A. Simon, A. Smith, M. Steller, M. Swayne, G.M. Szabó, D. Ségransan, N. Thomas, S. Udry, V. Van Grootel, N. Walton: Analysis of Early Science observations with the Characterising Exoplanets Satellite (CHEOPS) using PYCHEOPS. *Mon. Not. R. Astron. Soc.* 514, 1, 77-104 (2022).
- Mayer M.G., W. Becker, P. Predehl, M. Sasaki, M. Freyberg: A global view of shocked plasma in the supernova remnant Puppis A provided by SRG/eROSITA. *Astron. Astrophys.* 661, A31 (2022).
- McCarron A.P., S.L. Finkelstein, O.A. Chavez Ortiz, D. Davis, E.M. Cooper, I. Jung, D.R. White, G.C. Leung, K. Gebhardt, V. Acquaviva, W.P. Bowman, R. Ciardullo, E. Gawis-

- er, C. Gronwall, G.J. Hill, W. Kollatschny, M. Landriau, C. Liu, D.N. Mock, A.G. Sánchez: Stellar Populations of Ly α -emitting Galaxies in the HETDEX Survey. I. An Analysis of LAEs in the GOODS-N Field. *Ap. J.* 936, 2 (2022).
- Meng F., Á. Sánchez-Monge, P. Schilke, A. Ginsburg, C. DePree, N. Budaiev, D. Jeff, A. Schmiedeke, A. Schwörer, V. Veena, T. Möller: The physical and chemical structure of Sagittarius B2. VI. UCHii regions in Sgr B2. *Astron. Astrophys.* 666, A31 (2022).
- Mera Evans T., P. Hoeflich, R. Diehl: Galactic Positrons from Thermonuclear Supernovae. *Ap. J.* 930, 2 (2022).
- Mereghetti S., L. Sidoli, G. Ponti, A. Treves: X-Ray Observations of the Isolated Black Hole Candidate OGLE-2011-BLG-0462 and Other Collapsed Objects Discovered through Gravitational Microlensing. *Ap. J.* 934, 1 (2022).
- Mereminskiy I., A. Lutovinov, K. Postnov, V. Arefiev, I.Y. Lapshov, S. Molkov, S.Y. Sazonov, A. Semena, A.Y. Tkachenko, A. Shtykovsky, Z. Liu, J. Wilms, A. Rau, T. Dauser, I. Kreykenbohm: Search for Pre-Burst Emission from Binary Neutron Star Mergers with Spectrum-Roentgen-Gamma. *Astronomy Letters* 48, 7 (2022).
- Mizuno T., K. Hayashi, J. Metzger, I. Moskalenko, E. Orlando, A. Strong, H. Yamamoto: Gas and Cosmic-Ray Properties in the MBM 53, 54, and 55 Molecular Clouds and the Pegasus Loops Revealed by H I Line Profiles, Dust, and Gamma-Ray Data. *Ap. J.* 935, 2 (2022).
- Molina J., L.C. Ho, R. Wang, J. Shangguan, F.E. Bauer, E. Treister, M. Zhuang, C. Ricci, F. Bian: Ionized Outflows in Nearby Quasars Are Poorly Coupled to Their Host Galaxies. *Ap. J.* 935, 2 (2022).
- Möller A., M. Smith, M. Sako, M. Sullivan, M. Vincenzi, P. Wiseman, P. Armstrong, J. Asorey, D. Brout, D. Carollo, T. Davis, C. Frohmaier, L. Galbany, K. Glazebrook, L. Kelsey, R. Kessler, G. Lewis, C. Lidman, U. Malik, R. Nichol, D. Scolnic, B. Tucker, T. Abbott, M. Aguena, S. Allam, J. Annis, E. Bertin, S. Bocquet, D. Brooks, D. Burke, A. Carrero Rosell, M. Carrasco Kind, J. Carretero, F. Castander, C. Conselice, M. Costanzi, M. Crocce, L. da Costa, J. De Vicente, S. Desai, H. Diehl, P. Doel, S. Everett, I. Ferrero, D. Finley, B. Flaugher, D. Friedel, J. Frieman, J. García-Bellido, D. Gerdes, D. Gruen, R. Gruendl, J. Gschwend, G. Gutierrez, K. Herner, S. Hinton, D. Hollowood, K. Honscheid, D. James, K. Kuehn, N. Kuropatkin, O. Lahav, M. March, J. Marshall, F. Menanteau, R. Miquel, R. Morgan, A. Palmese, F. Paz-Chinchón, A. Pieres, A. Plazas Malagón, A. Romer, A. Roodman, E. Sanchez, V. Scarpine, M. Schubnell, S. Serrano, I. Sevilla-Noarbe, E. Suchyta, G. Tarle, D. Thomas, C. To, T. Varga: The dark energy survey 5-yr photometrically identified type Ia supernovae. *Mon. Not. R. Astron. Soc.* 514, 4, 5159-5177 (2022).
- Mollière P., T. Molyarova, B. Bitsch, T. Henning, A. Schneider, L. Kreidberg, C. Eistrup, R. Burn, E. Nasedkin, D. Semenov, C. Mordasini, M. Schlecker, K.R. Schwarz, S. Lacour, M. Nowak, M. Schulik: Interpreting the Atmospheric Composition of Exoplanets: Sensitivity to Planet Formation Assumptions. *Ap. J.* 934, 1 (2022).
- Mondal S., G. Ponti, F. Haberl, K. Anastasopoulou, S. Campana, K. Mori, C. Hailey, N. Rea: An intermediate polar candidate toward the Galactic plane. *Astron. Astrophys.* 666, A150 (2022).
- Moriya T., C. Inserra, M. Tanaka, E. Cappellaro, M. Della Valle, I. Hook, R. Kotak, G. Longo, F. Mannucci, S. Mattila, C. Tao, B. Altieri, A. Amara, N. Auricchio, D. Bonino, E. Branchini, M. Brescia, J. Brinchmann, S. Camera, V. Capobianco, C. Carbone, J. Carretero, M. Castellano, S. Cavuoti, A. Cimatti, R. Cledassou, G. Congedo, C. Conselice, L. Conversi, Y. Copin, L. Corcione, F. Courbin, M. Cropper, A. Da Silva, H. Degaudenzi, M. Douspis, F. Dubath, C. Duncan, X. Dupac, S. Dusini, A. Ealet, S. Farrens, S. Ferriol, M. Frailis, E. Franceschi, M. Fumana, B. Garilli, W. Gillard, B. Gillis, C. Giocoli, A. Grazian, F. Grupp, S. Haugan, W. Holmes, F. Hormuth, A. Hornstrup, K. Jahnke, S. Kermiche, A. Kiessling, M. Kilbinger, T. Kitching, H. Kurki-Suonio, S. Ligorì, P. Lilje, I. Lloro, E. Maiorano, O. Mansutti, O. Marggraf, K. Markovic, F. Marulli, R. Massey, H. McCracken, M. Melchior, M. Meneghetti, G. Meylan, M. Moresco, L. Moscardini, E. Munari, S. Niemi, C. Padilla, S. Paltani, F. Pasian, K. Pedersen, V. Pettorino, M. Poncet, L. Popa, F. Raison, J. Rhodes, G. Riccio, E. Rossetti, R. Saglia, B. Sartoris, P. Schneider, A. Secroun, G. Seidel, C. Sirignano, G. Sirri, L. Stanco, P. Tallada-Crespí, A. Taylor, I. Tereno, R. Toledo-Moreo, F. Torradeflot, Y. Wang, G. Zamorani, J. Zoubian, S. Andreon, V. Scottez, P. Morris: Euclid: Searching for pair-instability supernovae with the Deep Survey. *Astron. Astrophys.* 666, A157 (2022).
- Mowla L.A., S.E. Cutler, G.B. Brammer, I.G. Momcheva, K.E. Whitaker, P.G. van Dokkum, R.S. Bezanson, N.M. Förster Schreiber, M. Franx, K.G. Iyer, D. Marchesini, A. Muzzin, E.J. Nelson, R.E. Skelton, G.F. Snyder, D.A. Wake, S. Wuyts, A. van der Wel: 3D-DASH: The Widest Near-infrared Hubble Space Telescope Survey. *Ap. J.* 933, 2 (2022).
- Müller B., B. Giuliano, A. Vasyunin, G. Fedoseev, P. Caselli: Laboratory spectroscopy of theoretical ices: Predictions for JWST and test for astrochemical models. *Astron. Astrophys.* 668, A46 (2022).
- Muñoz-Darias T., G. Ponti: Simultaneous X-ray and optical spectroscopy of V404 Cygni supports the multi-phase nature of X-ray binary accretion disc winds. *Astron. Astrophys.* 664, A104 (2022).
- Murillo N., E. F. van Dishoeck, A. Hacar, D. Harsono, J. Jørgensen: A cold accretion flow onto one component of a multiple protostellar system. *Astron. Astrophys.* 658, A53 (2022).
- Murillo N., T.-H. Hsieh, C. Walsh: Modeling snowline locations in protostars: The impact of the structure of protostellar cloud cores. *Astron. Astrophys.* 665, A68 (2022).
- Naidu R.P., P.A. Oesch, P. van Dokkum, E.J. Nelson, K.A. Suess, G. Brammer, K.E. Whitaker, G. Illingworth, R. Bouwens, S. Tacchella, J. Matthee, N. Allen, R. Bezanson, C. Conroy, I. Labbe, J. Leja, E. Leonova, D. Magee, S.H. Price, D.J. Setton, V. Strait, M. Stefanon, S. Toft, J.R. Weaver, A. Weibel: Two Remarkably Luminous Galaxy Candidates at $z \approx 10$ -12 Revealed by JWST. *Ap. J. Lett.* 940, 1 (2022).

- Nazari P., B. Tabone, G. Rosotti, M. van Gelder, R. Meshaka, E. F. van Dishoeck: Importance of source structure on complex organics emission. II. Do disks explain lack of methanol emission from low-mass protostars?. *Astron. Astrophys.* 663, A58 (2022).
- Nazari P., J. Meijerhof, M. van Gelder, A. Ahmadi, E. F. van Dishoeck, B. Tabone, D. Langeroodi, N. Ligterink, J. Jaspers, M. Beltrán, G. Fuller, Á. Sánchez-Monge, P. Schilke: N-bearing complex organics toward high-mass protostars. Constant ratios pointing to formation in similar pre-stellar conditions across a large mass range. *Astron. Astrophys.* 668, A109 (2022).
- Nesseris S., D. Sapone, M. Martinelli, D. Camarena, V. Marra, Z. Sakr, J. Garcia-Bellido, C. Martins, C. Clarkson, A. Da Silva, P. Fleury, L. Lombriser, J. Mimoso, S. Casas, V. Pettorino, I. Tutusaus, A. Amara, N. Auricchio, C. Boddendorf, D. Bonino, E. Branchini, M. Brescia, V. Capobianco, C. Carbone, J. Carretero, M. Castellano, S. Cavuoti, A. Cimatti, R. Cledassou, G. Congedo, L. Conversi, Y. Copin, L. Corcione, F. Courbin, M. Cropper, H. Degaudenzi, M. Douspis, F. Dubath, C. Duncan, X. Dupac, S. Dusini, A. Ealet, S. Farrens, P. Fosalba, M. Frailis, E. Franceschi, M. Fumana, B. Garilli, B. Gillis, C. Giocoli, A. Grazian, F. Grupp, S. Haugan, W. Holmes, F. Hormuth, K. Jahnke, S. Kermiche, A. Kiessling, T. Kitching, M. Kümmel, M. Kunz, H. Kurki-Suonio, S. Ligorì, P. Lilje, I. Lloro, O. Mansutti, O. Marggraf, K. Markovic, F. Marulli, R. Massey, M. Meneghetti, E. Merlin, G. Meylan, M. Moresco, L. Moscardini, E. Munari, S. Niemi, C. Padilla, S. Paltani, F. Pasian, K. Pedersen, W. Percival, M. Poncet, L. Popa, G. Racca, F. Raison, J. Rhodes, M. Roncarelli, R. Saglia, B. Sartoris, P. Schneider, A. Secroun, G. Seidel, S. Serrano, C. Sirignano, G. Sirri, L. Stanco, J. Starck, P. Tallada-Crespí, A. Taylor, I. Tereno, R. Toledo-Moreo, F. Torradeflot, E. Valentijn, L. Valenziano, Y. Wang, N. Welikala, G. Zamorani, J. Zoubian, S. Andreon, M. Baldi, S. Camera, E. Medinaceli, S. Mei, A. Renzi: Euclid: Forecast constraints on consistency tests of the Λ CDM model. *Astron. Astrophys.* 660, A67 (2022).
- Neumann J., D. Thomas, C. Maraston, L. Hill, L. Nanni, O. Wenman, J. Lian, J. Comparat, V. Gonzalez-Perez, K.B. Westfall, R. Yan, Y. Chen, G.S. Stringfellow, M.A. Bershad, J.R. Brownstein, N. Drory, D.P. Schneider: The MaNGA FIREFLY value added catalogue: resolved stellar populations of 10 010 nearby galaxies. *Mon. Not. R. Astron. Soc.* 513, 4, 5988-6012 (2022).
- Neveux R., E. Burtin, V. Ruhlmann-Kleider, A. de Mattia, A. Semenaite, K.S. Dawson, A. de la Macorra, W.J. Percival, G. Rossi, D.P. Schneider, G. Zhao: Combined full shape analysis of BOSS galaxies and eBOSS quasars using an iterative emulator. *Mon. Not. R. Astron. Soc.* 516, 2, 1910-1922 (2022).
- Niemeyer, M. L., W.P. Bowman, R. Ciardullo, M. Gronke, E. Komatsu, M. Fabricius, D.J. Farrow, S.L. Finkelstein, K. Gebhardt, C. Gronwall, G.J. Hill, C. Liu, E.M. Cooper, D.P. Schneider, S. Tuttle, & G.R. Zeimann: Ly α halos around [O iii]-selected galaxies in HETDEX. *Ap. J.* 934, 2, L26 (2022).
- Niemeyer, M. L., E. Komatsu, C. Byrohl, D. Davis, M. Fabricius, K. Gebhardt, G.J. Hill, L. Wisotzki, W.P. Bowman, R. Ciardullo, D.J. Farrow, S.L. Finkelstein, E. Gawiser, C. Gronwall, D. Jeong, M. Landriau, C. Liu, E.M. Cooper, M. Ouchi, D.P. Schneider, & G.R. Zeimann: Surface brightness profile of Lyman- α halos out to 320 kpc in HETDEX. *Ap. J.* 929, 1 (2022).
- Oberg N., I. Kamp, S. Cazaux, P. Woitke, W. Thi: Circumplanetary disk ices. I. Ice formation vs. viscous evolution and grain drift. *Astron. Astrophys.* 667, A95 (2022).
- O'Donnell J., R. Wilkinson, H. Diehl, C. Aros-Bunster, K. Bechtol, S. Birrer, E. Buckley-Geer, A. Carnero Rosell, M. Carrasco Kind, L. da Costa, S. Gonzalez Lozano, R. Gruendl, M. Hilton, H. Lin, K. Lindgren, J. Martin, A. Pieres, E. Rykoff, I. Sevilla-Noarbe, E. Sheldon, C. Sifón, D. Tucker, B. Yanny, T. Abbott, M. Aguena, S. Allam, F. Andrade-Oliveira, J. Annis, E. Bertin, D. Brooks, D. Burke, J. Carretero, M. Costanzi, J. De Vicente, S. Desai, J. Dietrich, K. Eckert, S. Everett, I. Ferrero, B. Flaugher, P. Fosalba, J. Frieman, J. García-Bellido, E. Gaztanaga, D. Gerdes, D. Gruen, J. Gschwend, M. Gill, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. James, T. Jeltama, K. Kuehn, O. Lahav, M. Lima, M. Maia, J. Marshall, P. Melchior, F. Menanteau, R. Miquel, R. Morgan, B. Nord, R. Ogando, F. Paz-Chinchón, M. Pereira, A. Plazas Malagón, M. Rodriguez-Monroy, A. Romer, A. Roodman, E. Sanchez, V. Scarpine, M. Schubnell, S. Serrano, M. Smith, E. Suchyta, M. Swanson, G. Tarle, D. Thomas, C. To, T. Varga: The Dark Energy Survey Bright Arcs Survey: Candidate Strongly Lensed Galaxy Systems from the Dark Energy Survey 5000 Square Degree Footprint. *Ap. J. Supp. Ser.* 259, 1 (2022).
- Offner S.S., J. Taylor, C. Markey, H.H. Chen, J.E. Pineda, A.A. Goodman, A. Burkert, A. Ginsburg, S. Choudhury: Turbulence, coherence, and collapse: Three phases for core evolution. *Mon. Not. R. Astron. Soc.* 517, 1, 885-909 (2022).
- Ogiya G., F.C. van den Bosch, A. Burkert, X. Kang: Testing the Galaxy-collision-induced Formation Scenario for the Trail of Dark-matter-deficient Galaxies with the Susceptibility of Globular Clusters to the Tidal Force. *Ap. J. Lett.* 940, 2 (2022).
- Ogiya G., F.C. van den Bosch, A. Burkert: On the tidal formation of dark matter-deficient galaxies. *Mon. Not. R. Astron. Soc.* 510, 2 (2022).
- Oh K., M.J. Koss, Y. Ueda, D. Stern, C. Ricci, B. Trakhtenbrot, M.C. Powell, J.S. den Brok, I. Lamperti, R. Mushotzky, F. Ricci, R.E. Bär, A.F. Rojas, K. Ichikawa, R. Riffel, E. Treister, F. Harrison, C.M. Urry, F.E. Bauer, K. Schawinski: BASS. XXIV. The BASS DR2 Spectroscopic Line Measurements and AGN Demographics. *Ap. J. Supp. Ser.* 261, 1 (2022).
- Ohashi S., C. Codella, N. Sakai, C.J. Chandler, C. Ceccarelli, F. Alves, D. Fedele, T. Hanawa, A. Durán, C. Favre, A. López-Sepulcre, L. Loinard, S. Mercimek, N.M. Muriilo, L. Podio, Y. Zhang, Y. Aikawa, N. Balucani, E. Bianchi, M. Bouvier, G. Busquet, P. Caselli, E. Caux, S. Charnley,

- S. Choudhury, N. Cuello, M. De Simone, F. Dulieu, L. Evans, S. Feng, F. Fontani, L. Francis, T. Hama, E. Herbst, S. Hirano, T. Hirota, M. Imai, A. Isella, I. Jiménez-Serra, D. Johnstone, C. Kahane, R. Le Gal, B. Lefloch, L.T. Maud, M.J. Maureira, F. Menard, A. Miotello, G. Moellenbrock, S. Mori, R. Nakatani, H. Nomura, Y. Oba, R. O'Donoghue, Y. Okoda, J. Ospina-Zamudio, Y. Oya, J. Pineda, A. Rimola, T. Sakai, D. Segura-Cox, Y. Shirley, B. Svoboda, V. Taquet, L. Testi, C. Vastel, S. Viti, N. Watanabe, Y. Watanabe, A. Witzel, C. Xue, B. Zhao, S. Yamamoto: Misaligned Rotations of the Envelope, Outflow, and Disks in the Multiple Protostellar System of VLA 1623-2417: FAUST. III. *Ap. J.* 927, 1 (2022).
- Orlando E., E. Bottacini, A. Moiseev, A. Bodaghee, W. Collmar, T. Ensslin, I.V. Moskalenko, M. Negro, S. Profumo, S.W. Digel, D.J. Thompson, M.G. Baring, A. Bolotnikov, N. Cannady, G.A. Carini, V. Eberle, I.A. Grenier, A.K. Harding, D. Hartmann, S. Herrmann, M. Kerr, R. Krivonos, P. Laurent, F. Longo, A. Morselli, B. Philips, M. Sasaki, P. Shawhan, D. Shy, G. Skinner, L.D. Smith, F.W. Stecker, A. Strong, S. Sturmer, J.A. Tomsick, Z. Wadiasingh, R.S. Woolf, E. Yates, K. Ziock, A. Zoglauer: Exploring the MeV sky with a combined coded mask and Compton telescope: the Galactic Explorer with a Coded aperture mask Compton telescope (GECCO). *J. of Cosmology and Astroparticle Phys.* 2022, 7 (2022).
- Osborn H., A. Bonfanti, D. Gandolfi, C. Hedges, A. Leleu, A. Fortier, D. Futyan, P. Gutermann, P. Maxted, L. Borsato, K. Collins, J. Gomes da Silva, Y. Gómez Maqueo Chew, M. Hooton, M. Lendl, H. Parviainen, S. Salmon, N. Schanche, L. Serrano, S. Sousa, A. Tuson, S. Ulmer-Moll, V. Van Grootel, R. Wells, T. Wilson, Y. Alibert, R. Alonso, G. Anglada, J. Asquier, D. Barrado y Navascues, W. Baumjohann, T. Beck, W. Benz, F. Biondi, X. Bonfils, F. Bouchy, A. Brandeker, C. Broeg, T. Bárczy, S. Barros, J. Cabrera, S. Charnoz, A. Collier Cameron, S. Csizmadia, M. Davies, M. Deleuil, L. Delrez, B. Demory, D. Ehrenreich, A. Erikson, L. Fossati, M. Fridlund, M. Gillon, M. Gómez-Munoz, M. Güdel, K. Heng, S. Hoyer, K. Isaak, L. Kiss, J. Laskar, A. Lecavelier des Etangs, C. Lovis, D. Magrin, L. Malavolta, J. McCormac, V. Nascimbeni, G. Olofsson, R. Ottensamer, I. Pagano, E. Pallé, G. Peter, D. Piazza, G. Piotto, D. Pollacco, D. Queloz, R. Ragazzoni, N. Rando, H. Rauer, C. Reimers, I. Ribas, O. Demangeon, A. Smith, L. Sabin, N. Santos, G. Scandariato, U. Schroffenegger, R. Schwarz, A. Shporer, A. Simon, M. Steller, G. Szabó, D. Ségransan, N. Thomas, S. Udry, I. Walter, N. Walton: Uncovering the true periods of the young sub-Neptunes orbiting TOI-2076. *Astron. Astrophys.* 664, A156 (2022).
- Oyarzún G.A., K. Bundy, K.B. Westfall, J.L. Tinker, F. Belfiore, M. Argudo-Fernández, Z. Zheng, C. Conroy, K.L. Masters, D. Wake, D.R. Law, R.M. McDermid, A. Aragón-Salamanca, T. Parikh, R. Yan, M. Bershad, S.F. Sánchez, B.H. Andrews, J.G. Fernández-Trincado, R.R. Lane, D. Bizyaev, N.F. Boardman, I. Lacerna, J. Brownstein, N. Drory, K. Zhang: SDSS-IV MaNGA: How the Stellar Populations of Passive Central Galaxies Depend on Stellar and Halo Mass. *Ap. J.* 933, 1 (2022).
- Padovani M., S. Bialy, D. Galli, A.V. Ivlev, T. Grassi, L.H. Scarlett, U.S. Rehill, M.C. Zammit, D.V. Fursa, I. Bray: Cosmic rays in molecular clouds probed by H₂ rovibrational lines. Perspectives for the James Webb Space Telescope. *Astron. Astrophys.* 658, A189 (2022).
- Pan H., E. Schinnerer, A. Hughes, A. Leroy, B. Groves, A.T. Barnes, F. Belfiore, F. Bigiel, G.A. Blanc, Y. Cao, M. Chevance, E. Congiu, D.A. Dale, C. Eibensteiner, E. Emsellem, C.M. Faesi, S.C. Glover, K. Grasha, C.N. Herrera, I. Ho, R.S. Klessen, J.D. Kruijssen, P. Lang, D. Liu, R. McElroy, S.E. Meidt, E.J. Murphy, J. Pety, M. Querejeta, A. Razza, E. Rosolowsky, T. Saito, F. Santoro, A. Schrubba, J. Sun, N. Tomičić, A. Usero, D. Utomo, T.G. Williams: The Gas-Star Formation Cycle in Nearby Star-forming Galaxies. II. Resolved Distributions of CO and H α Emission for 49 PHANGS Galaxies. *Ap. J.* 927, 1 (2022).
- Pandey S., E. Krause, J. DeRose, N. MacCrann, B. Jain, M. Croce, J. Blazek, A. Choi, H. Huang, C. To, X. Fang, J. Elvin-Poole, J. Prat, A. Porredon, L. Secco, M. Rodriguez-Monroy, N. Weaverdyck, Y. Park, M. Raveri, E. Roza, E. Rykoff, G. Bernstein, C. Sánchez, M. Jarvis, M. Troxel, G. Zacharegkas, C. Chang, A. Alarcon, O. Alves, A. Amon, F. Andrade-Oliveira, E. Baxter, K. Bechtol, M. Becker, H. Camacho, A. Campos, A. Carnero Rosell, M. Carrasco Kind, R. Cawthon, R. Chen, P. Chintalapati, C. Davis, E. Di Valentino, H. Diehl, S. Dodelson, C. Doux, A. Drlica-Wagner, K. Eckert, T. Eifler, F. Elsner, S. Everett, A. Farahi, A. Ferté, P. Fosalba, O. Friedrich, M. Gatti, G. Giannini, D. Gruen, R. Gruendl, I. Harrison, W. Hartley, E. Huff, D. Huterer, A. Kovacs, P. Leget, J. McCullough, J. Muir, J. Myles, A. Navarro-Alsina, Y. Omori, R. Rollins, A. Roodman, R. Rosenfeld, I. Sevilla-Noarbe, E. Sheldon, T. Shin, A. Troja, I. Tutusaus, T. Varga, R. Wechsler, B. Yanny, B. Yin, Y. Zhang, J. Zuntz, T. Abbott, M. Aguena, S. Allam, J. Annis, D. Bacon, E. Bertin, D. Brooks, D. Burke, J. Carretero, C. Conselice, M. Costanzi, L. da Costa, M. Pereira, J. De Vicente, J. Dietrich, P. Doel, A. Evrard, I. Ferrero, B. Flaugher, J. Frieman, J. García-Bellido, E. Gaztanaga, D. Gerdes, T. Giannantonio, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. James, T. Jeltema, K. Kuehn, N. Kuropatkin, O. Lahav, M. Lima, H. Lin, M. Maia, J. Marshall, P. Melchior, F. Menanteau, C. Miller, R. Miquel, J. Mohr, R. Morgan, A. Palmese, F. Paz-Chinchón, D. Petravick, A. Pieres, A. Plazas Malagón, E. Sanchez, V. Scarpine, S. Serrano, M. Smith, M. Soares-Santos, E. Suchyta, G. Tarle, D. Thomas, J. Weller, DES Collaboration: Dark Energy Survey year 3 results: Constraints on cosmological parameters and galaxy-bias models from galaxy clustering and galaxy-galaxy lensing using the redMaGiC sample. *Physical Review D* 106, 4 (2022).
- Pandey S., M. Gatti, E. Baxter, J. Hill, X. Fang, C. Doux, G. Giannini, M. Raveri, J. DeRose, H. Huang, E. Moser, N. Battaglia, A. Alarcon, A. Amon, M. Becker, A. Campos, C. Chang, R. Chen, A. Choi, K. Eckert, J. Elvin-Poole, S. Everett, A. Ferte, I. Harrison, N. MacCrann, J. McCullough, J. Myles, A. Navarro Alsina, J. Prat, R. Rollins, C. Sanchez, T. Shin, M. Troxel, I. Tutusaus, B. Yin, M. Aguena, S. Allam, F. Andrade-Oliveira, G. Bernstein, E. Bertin, B. Bolliet, J. Bond, D. Brooks, E. Calabrese, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, R. Cawthon, M. Costanzi, M. Croce, L. da Costa, M. Pereira, J. De Vicente, S. De

- sai, H. Diehl, J. Dietrich, P. Doel, J. Dunkley, S. Everett, A. Evrard, S. Ferraro, I. Ferrero, B. Flaugher, P. Fosalba, J. García-Bellido, E. Gaztanaga, D. Gerdes, T. Giannantonio, D. Gruen, R. Gruendl, J. Gschwend, G. Gutierrez, K. Herner, A. Hincks, S. Hinton, D. Hollowood, K. Honscheid, J. Hughes, D. Huterer, B. Jain, D. James, T. Jeltema, E. Krause, K. Kuehn, O. Lahav, M. Lima, M. Lokken, M. Madhavacheril, M. Maia, J. McMahon, P. Melchior, F. Menanteau, R. Miquel, J. Mohr, K. Moodley, R. Morgan, F. Nati, M. Niemack, L. Page, A. Palmese, F. Paz-Chinchón, A. Pieres, A. Plazas Malagón, M. Rodríguez-Monroy, A. Romer, E. Sanchez, V. Scarpine, E. Schaan, S. Serrano, I. Sevilla-Noarbe, E. Sheldon, B. Sherwin, C. Sifón, M. Smith, M. Soares-Santos, D. Spergel, E. Suchyta, M. Swanson, G. Tarle, D. Thomas, C. To, T. Varga, J. Weller, E. Wollack, Z. Xu, DES, ACT Collaboration: Cross-correlation of Dark Energy Survey Year 3 lensing data with ACT and Planck thermal Sunyaev-Zel'dovich effect observations. II. Modeling and constraints on halo pressure profiles. *Physical Review D* 105, 12 (2022).
- Paneque-Carreño T., A. Miotello, E. F. van Dishoeck, L. Pérez, S. Facchini, A. Izquierdo, L. Tychoniec, L. Testi: Vertically extended and asymmetric CN emission in the Elias 2-27 protoplanetary disk. *Astron. Astrophys.* 666, A168 (2022).
- Panizo-Espinar G., M. Armas Padilla, T. Muñoz-Darias, K. Koljonen, V. Cúneo, J. Sánchez-Sierras, D. Mata Sánchez, J. Casares, J. Corral-Santana, R. Fender, F. Jiménez-Ibarra, G. Ponti, D. Steeghs, M. Torres: Discovery of optical and infrared accretion disc wind signatures in the black hole candidate MAXI J1348-630. *Astron. Astrophys.* 664, A100 (2022).
- Pasini T., M. Brüggen, D. Hoang, V. Ghirardini, E. Bulbul, M. Klein, A. Liu, T. Shimwell, M. Hardcastle, W. Williams, A. Botteon, F. Gastaldello, R. van Weeren, A. Merloni, F. de Gasperin, Y. Bahar, F. Pacaud, M. E. Ramos-Ceja: The eROSITA Final Equatorial-Depth Survey (eFEDS). LOFAR view of brightest cluster galaxies and AGN feedback. *Astron. Astrophys.* 661, A13 (2022).
- Pennock, C. M., J.T. van Loon, J.O. Anih, C. Maitra, F. Haberl, A.E. Sansom, V.D. Ivanov, M.J. Cowley, J. Afonso, S. Antón, M.-R.L. Cioni, J.E.M. Craig, M.D. Filipović, A.M. Hopkins, A. Nanni, I. Prandoni, E. Vardoulaki: The VMC survey - XLIX. Discovery of a population of quasars dominated by nuclear dust emission behind the Magellanic Clouds. *Mon. Not. R. Astron. Soc.* 515, 4, 6046-6065 (2022).
- Penton A., U. Malik, T. Davis, P. Martini, Z. Yu, R. Sharp, C. Lidman, B. Tucker, J. Hoormann, M. Aguena, S. Allam, J. Annis, J. Asorey, D. Bacon, E. Bertin, S. Bhargava, D. Brooks, J. Calcino, A. Carnero Rosell, D. Carollo, M. Carrasco Kind, J. Carretero, M. Costanzi, L. da Costa, M. Pereira, J. De Vicente, H. Diehl, T. Eifler, S. Everett, I. Ferrero, P. Fosalba, J. Frieman, J. García-Bellido, E. Gaztanaga, D. Gerdes, D. Gruen, R. Gruendl, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. James, A. Kim, K. Kuehn, N. Kuropatkin, M. Maia, J. Marshall, F. Menanteau, R. Miquel, R. Morgan, A. Möller, A. Palmese, F. Paz-Chinchón, A. Plazas, A. Romer, E. Sanchez, V. Scarpine, D. Scolnic, S. Serrano, M. Smith, E. Suchyta, M. Swanson, G. Tarle, C. To, S. Uddin, T. Varga, W. Wester, R. Wilkinson, G. Lewis, G. Lewis, DES Collaboration: OzDES reverberation mapping program: Lag recovery reliability for 6-yr C IV analysis. *Mon. Not. R. Astron. Soc.* 509, 3 (2022).
- Perera S., J. Pott, J. Woillez, M. Kulas, W. Brandner, S. Lacour, F. Widmann: Piston Reconstruction Experiment (P-REx) - II. Off-line performance evaluation with VLT/ GRAVITY. *Mon. Not. R. Astron. Soc.* 511, 4, 5709-5717 (2022).
- Péroux C., S. Weng, A. Karki, R. Augustin, V. Kulkarni, R. Szakacs, A. Klitsch, A. Hamanowicz, A. Fresco, M. Zwaan, A. Biggs, A. Fox, M. Hayes, J. Howk, G. Kacprzak, S. Kassin, H. Kuntschner, D. Nelson, M. Pettini: MUSE-ALMA haloes VII: survey science goals & design, data processing and final catalogues. *Mon. Not. R. Astron. Soc.* 516, 4, 5618-5636 (2022).
- Pessa I., E. Schinnerer, A. Leroy, E. Koch, E. Rosolowsky, T. Williams, H. Pan, A. Schrubba, A. Usero, F. Belfiore, F. Bigiel, G. Blanc, M. Chevance, D. Dale, E. Emsellem, J. Gensior, S. Glover, K. Grasha, B. Groves, R. Klessen, K. Kreckel, J. Kruijssen, D. Liu, S. Meidt, J. Pety, M. Querejeta, T. Saito, P. Sanchez-Blazquez, E. Watkins: Variations in the $\Sigma_{\text{SFR}} - \Sigma_{\text{mol}} - \Sigma_{\text{star}}$ plane across galactic environments in PHANGS galaxies. *Astron. Astrophys.* 663, A61 (2022).
- Pineda J.E., J. Harju, P. Caselli, O. Sipilä, M. Juvela, C. Vastel, E. Rosolowsky, A. Burkert, R.K. Friesen, Y. Shirley, M.J. Maureira, S. Choudhury, D.M. Segura-Cox, R. Güsten, A. Punanova, L. Bizzocchi, A.A. Goodman: An Interferometric View of H-MM1. I. Direct Observation of NH_3 Depletion. *Astron. J.* 163, 6 (2022).
- Pires A., C. Motch, J. Kurpas, A. Schwobe, F. Valdes, F. Haberl, I. Traulsen, D. Tubín, W. Becker, J. Comparat, C. Maitra, A. Meisner, J. Moustakas, M. Salvato: XMM-Newton and SRG/eROSITA observations of the isolated neutron star candidate 4XMM J022141.5-735632. *Astron. Astrophys.* 666, A148 (2022).
- Pirovano L., D. Fedele, E. F. van Dishoeck, M. Hogerheijde, G. Lodato, S. Bruderer: H_2O distribution in the disc of HD 100546 and HD 163296: the role of dust dynamics and planet-disc interaction. *Astron. Astrophys.* 665, A45 (2022).
- Poci A., R. McDermid, M. Lyubenova, I. Martín-Navarro, G. van de Ven, L. Coccato, E. Corsini, K. Fahrion, J. Falcón-Barroso, D. Gadotti, E. Iodice, F. Pinna, M. Sarzi, P. de Zeeuw, L. Zhu: The Fornax3D project: intrinsic correlations between orbital properties and the stellar initial mass function. *Mon. Not. R. Astron. Soc.* 514, 3 (2022).
- Porredon A., M. Crocce, J. Elvin-Poole, R. Cawthon, G. Giannini, J. De Vicente, A. Carnero Rosell, I. Ferrero, E. Krause, X. Fang, J. Prat, M. Rodríguez-Monroy, S. Pandey, A. Pocino, F. Castander, A. Choi, A. Amon, I. Tutusaus, S. Dodelson, I. Sevilla-Noarbe, P. Fosalba, E. Gaztanaga, A. Alarcon, O. Alves, F. Andrade-Oliveira, E. Baxter, K. Bechtol, M. Becker, G. Bernstein, J. Blazek, H. Camacho, A. Campos, M. Carrasco Kind, P. Chintalapati, J. Cordero, J.

- DeRose, E. Di Valentino, C. Doux, T. Eifler, S. Everett, A. Ferté, O. Friedrich, M. Gatti, D. Gruen, I. Harrison, W. Hartley, K. Herner, E. Huff, D. Huterer, B. Jain, M. Jarvis, S. Lee, P. Lemos, N. MacCrann, J. Mena-Fernández, J. Muir, J. Myles, Y. Park, M. Raveri, R. Rosenfeld, A. Ross, E. Rykoff, S. Samuroff, C. Sánchez, E. Sanchez, J. Sanchez, D. Sanchez Cid, D. Scolnic, L. Secco, E. Sheldon, A. Troja, M. Troxel, N. Weaverdyck, B. Yanny, J. Zuntz, T. Abbott, M. Agüena, S. Allam, J. Annis, S. Avila, D. Bacon, E. Bertin, S. Bhargava, D. Brooks, E. Buckley-Geer, D. Burke, J. Carretero, M. Costanzi, L. da Costa, M. Pereira, T. Davis, S. Desai, H. Diehl, J. Dietrich, P. Doel, A. Drlica-Wagner, K. Eckert, A. Evrard, B. Flaugher, J. Frieman, J. García-Bellido, D. Gerdes, T. Giannantonio, R. Gruendl, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, B. Hoyle, D. James, K. Kuehn, N. Kuropatkin, O. Lahav, C. Lidman, M. Lima, H. Lin, M. Maia, J. Marshall, P. Martini, P. Melchior, F. Menanteau, R. Miquel, J. Mohr, R. Morgan, R. Ogando, A. Palmese, F. Paz-Chinchón, D. Petravick, A. Plazas Malagón, E. Sanchez, S. Serrano, M. Smith, M. Soares-Santos, E. Suchyta, G. Tarle, D. Thomas, J. Weller, DES Collaboration: Dark energy survey year 3 results: High-precision measurement and modeling of galaxy-galaxy lensing. *Physical Review D* 105, 8 (2022).
- Price S., H. Übler, N. M. Förster Schreiber, P. de Zeeuw, A. Burkert, R. Genzel, L. Tacconi, R. Davies, C. Price: Kinematics and mass distributions for non-spherical deprojected Sérsic density profiles and applications to multi-component galactic systems. *Astron. Astrophys.* 665, A159 (2022).
- Prinoth B., H.J. Hoeijmakers, D. Kitzmann, E. Sandvik, J.V. Seidel, M. Lendl, N.W. Borsato, B. Thorsbro, D.R. Anderson, D. Barrado, K. Kravchenko, R. Allart, V. Bourrier, H.M. Cegla, D. Ehrenreich, C. Fisher, C. Lovis, A. Guzmán-Mesa, S. Grimm, M. Hooton, B.M. Morris, M. Oreshenko, L. Pino, K. Heng: Titanium oxide and chemical inhomogeneity in the atmosphere of the exoplanet WASP-189 b. *Nature Astronomy* 6 (2022).
- Punanova A., A. Vasyunin, P. Caselli, A. Howard, S. Spezzano, Y. Shirley, S. Scibelli, J. Harju: Methanol Mapping in Cold Cores: Testing Model Predictions. *Ap. J.* 927, 2 (2022).
- Quintana H., D. Proust, I. Lacerna, H. Böhringer: New insights into the Triangulum Australis supercluster of galaxies. *Astron. Astrophys.* 667, A66 (2022).
- Rab C., M. Weber, T. Grassi, B. Ercolano, G. Picogna, P. Caselli, W.-F. Thi, I. Kamp, P. Woitke: Interpreting molecular hydrogen and atomic oxygen line emission of T Tauri disks with photoevaporative disk-wind models. *Astron. Astrophys.* 668, A154 (2022).
- Racero E., F. Giordano, B. Carry, J. Berthier, T. G. Müller, M. Mahlke, I. Valtchanov, D. Baines, S. Kruk, B. Merín, S. Besse, M. Küppers, E. Puga, J. González Núñez, P. Rodríguez, I. de la Calle, B. López-Martí, H. Norman, M. Wångblad, M. López-Caniego, N. Álvarez Crespo: ESASky SSOSS: Solar System Object Search Service and the case of Psyche. *Astron. Astrophys.* 659, A38 (2022).
- Ramos-Ceja M.E., M. Oguri, S. Miyazaki, V. Ghirardini, I. Chiu, N. Okabe, A. Liu, T. Schrabback, D. Akino, Y. Bahar, E. Bulbul, N. Clerc, J. Comparat, S. Grandis, M. Klein, Y. Lin, A. Merloni, I. Mitsuishi, H. Miyatake, S. More, K. Nandra, A. Nishizawa, N. Ota, F. Pacaud, T. Reiprich, J. Sanders: The eROSITA Final Equatorial-Depth Survey (eFEDS). A complete census of X-ray properties of Subaru Hyper Suprime-Cam weak lensing shear-selected clusters in the eFEDS footprint. *Astron. Astrophys.* 661, A14 (2022).
- Randich, S., ..., O. Gerhard et al.: The Gaia-ESO Public Spectroscopic Survey: Implementation, data products, open cluster survey, science, and legacy. *Astron. Astrophys.* 666, A121 (2022).
- Redaelli E., A. Chacón-Tanarro, P. Caselli, M. Tafalla, J.E. Pineda, S. Spezzano, O. Sipilä: A Large (≈ 1 pc) Contracting Envelope Around the Prestellar Core L1544. *Ap. J.*
- Porter-Temple R., B. Holwerda, A. Hopkins, L. Porter, C. Henry, T. Geron, B. Simmons, K. Masters, S. Kruk: Galaxy And Mass Assembly: Galaxy Zoo spiral arms and star formation rates. *Mon. Not. R. Astron. Soc.* 515, 3, 3875-3882 (2022).
- Portilla-Revelo B., I. Kamp, C. Rab, E. F. van Dishoeck, M. Keppler, M. Min, G. Muro-Arena: Self-consistent modeling of the dust component in protoplanetary and circumplanetary disks: the case of PDS 70. *Astron. Astrophys.* 658, A89 (2022).
- Prat J., J. Blazek, C. Sánchez, I. Tutusaus, S. Pandey, J. Elvin-Poole, E. Krause, M. Troxel, L. Secco, A. Amon, J. DeRose, G. Zacharegkas, C. Chang, B. Jain, N. MacCrann, Y. Park, E. Sheldon, G. Giannini, S. Bocquet, C. To, A. Alarcon, O. Alves, F. Andrade-Oliveira, E. Baxter, K. Bechtol, M. Becker, G. Bernstein, H. Camacho, A. Campos, A. Carnero Rosell, M. Carrasco Kind, R. Cawthon, R. Chen, A. Choi, J. Cordero, M. Crocce, C. Davis, J. De Vicente, H. Diehl, S. Dodelson, C. Doux, A. Drlica-Wagner, K. Eckert, T. Eifler, F. Elsner, S. Everett, X. Fang, A. Farahi, A. Ferté, P. Fosalba, O. Friedrich, M. Gatti, D. Gruen, R. Gruendl, I. Harrison, W. Hartley, K. Herner, H. Huang, E. Huff, D. Huterer, M. Jarvis, N. Kuropatkin, P. Leget, P. Lemos, A. Liddle, J. McCullough, J. Muir, J. Myles, A. Navarro-Alsina, A. Porredon, M. Raveri, M. Rodriguez-Monroy, R. Rollins, A. Roodman, R. Rosenfeld, A. Ross, E. Rykoff, J. Sanchez, I. Sevilla-Noarbe, T. Shin, A. Troja, T. Varga, N. Weaverdyck, R. Wechsler, B. Yanny, B. Yin, J. Zuntz, T. Abbott, M. Agüena, S. Allam, J. Annis, D. Bacon, D. Brooks, D. Burke, J. Carretero, C. Conselice, M. Costanzi, L. da Costa, M. Pereira, S. Desai, J. Dietrich, P. Doel, A. Evrard, I. Ferrero, B. Flaugher, J. Frieman, J. García-Bellido, E. Gaztanaga, D. Gerdes, T. Giannantonio, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. James, K.

941, 2 (2022).

Redaelli E., S. Bovino, P. Sanhueza, K. Morii, G. Sabatini, P. Caselli, A. Giannetti, S. Li: The Core Population and Kinematics of a Massive Clump at Early Stages: An Atacama Large Millimeter/submillimeter Array View. *Ap. J.* 936, 2 (2022).

Reddy N.A., M.W. Topping, A.E. Shapley, C.C. Steidel, R.L. Sanders, X. Du, A.L. Coil, B. Mobasher, S.H. Price, I. Shivaie: The Effects of Stellar Population and Gas Covering Fraction on the Emergent Ly α Emission of High-redshift Galaxies. *Ap. J.* 926, 1 (2022).

Riaz B., W.-F. Thi: A survey of HDCO and D₂CO towards Class 0/I proto-brown dwarfs. *Mon. Not. R. Astron. Soc.* 514, 3, 3604-3611 (2022).

Riaz B., W.-F. Thi: Deuterium chemistry and D/H ratios in Class 0/I proto-brown dwarfs. *Mon. Not. R. Astron. Soc.* 511, 4, 6110-6125 (2022).

Riaz B., W.-F. Thi: First CH₃D detection in Class 0/I proto-brown dwarfs: constraints on CH₄ abundances. *Mon. Not. R. Astron. Soc.* 511, 1 (2022).

Riffel R., L.G. Dahmer-Hahn, R.A. Riffel, T. Storchi-Bergmann, N.Z. Dametto, R. Davies, L. Burtscher, M. Bianchin, D. Ruschel-Dutra, C. Ricci, D.J. Rosario: Gemini NIFS survey of feeding and feedback processes in nearby active galaxies - VI. Stellar populations. *Mon. Not. R. Astron. Soc.* 512, 3, 3906-3921 (2022).

Rodríguez-Monroy M., N. Weaverdyck, J. Elvin-Poole, M. Crocche, A. Carnero Rosell, F. Andrade-Oliveira, S. Avila, K. Bechtol, G. Bernstein, J. Blazek, H. Camacho, R. Cawthon, J. De Vicente, J. DeRose, S. Dodelson, S. Everett, X. Fang, I. Ferrero, A. Ferté, O. Friedrich, E. Gaztanaga, G. Gianini, R. Gruendl, W. Hartley, K. Herner, E. Huff, M. Jarvis, E. Krause, N. MacCrann, J. Mena-Fernández, J. Muir, S. Pandey, Y. Park, A. Porredon, J. Prat, R. Rosenfeld, A. Ross, E. Rozo, E. Rykoff, E. Sanchez, D. Sanchez Cid, I. Sevilla-Noarbe, M. Tabbutt, C. To, E. Wagoner, G. Wechsler, M. Agüena, S. Allam, A. Amon, J. Annis, D. Bacon, E. Baxter, E. Bertin, S. Bhargava, D. Brooks, D. Burke, M. Carrasco Kind, J. Carretero, F. Castander, A. Choi, C. Conselice, M. Costanzi, L. da Costa, M. Pereira, S. Desai, H. Diehl, B. Flaugher, P. Fosalba, J. Frieman, J. García-Bellido, T. Giannantonio, D. Gruen, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. Huterer, B. Jain, D. James, K. Kuehn, N. Kuropatkin, M. Lima, M. Maia, M. March, J. Marshall, P. Melchior, F. Menanteau, C. Miller, R. Miquel, J. Mohr, R. Morgan, A. Palmese, F. Paz-Chinchón, A. Pieres, A. Plazas Malagón, A. Roodman, V. Scarpine, S. Serrano, M. Smith, M. Soares-Santos, E. Suchyta, G. Tarle, D. Thomas, T. Varga, DES Collaboration: Dark Energy Survey Year 3 results: galaxy clustering and systematics treatment for lens galaxy samples. *Mon. Not. R. Astron. Soc.* 511, 2 (2022).

Rossi A., D. Frederiks, D. Kann, M. De Pasquale, E. Pian, G. Lamb, P. D'Avanzo, L. Izzo, A. Levan, D. Malesani, A. Melandri, A. Nicuesa Guelbenzu, S. Schulze, R. Strausbaugh, N. Tanvir, L. Amati, S. Campana, A. Cucchiara, G. Ghirlanda, M. Della Valle, S. Klose, R. Salvaterra, R. Starling, G. Stratta, A. Tsvetkova, S. Vergani, A. D'Ai, D. Burgarella,

S. Covino, V. D'Elia, A. de Ugarte Postigo, H. Fausey, J. Fynbo, F. Frontera, C. Guidorzi, K. Heintz, N. Masetti, E. Maiorano, C. Mundell, S. Oates, M. Page, E. Palazzi, J. Palmerio, G. Pugliese, A. Rau, A. Saccardi, B. Sbarufatti, D. Svinkin, G. Tagliaferri, A. van der Horst, D. Watson, M. Ulanov, K. Wiersema, D. Xu, J. Zhang: A blast from the infant Universe: The very high-*z* GRB 210905A. *Astron. Astrophys.* 665, A125 (2022).

Runco J.N., A.E. Shapley, M. Kriek, M. Cappellari, M.W. Topping, R.L. Sanders, V.I. Kokorev, S.H. Price, N.A. Reddy, A.L. Coil, B. Mobasher, B. Siana, T. Zick, G.E. Magdis, G. Brammer, J. Aird: The MOSDEF survey: a new view of a remarkable *z* = 1.89 merger. *Mon. Not. R. Astron. Soc.* 517, 3, 4405-4416 (2022).

Runco J.N., A.E. Shapley, R.L. Sanders, M. Kriek, N.A. Reddy, A.L. Coil, B. Mobasher, B. Siana, M.W. Topping, W.R. Freeman, I. Shivaie, M. Azadi, S.H. Price, G.C. Leung, T. Fetherolf, L. de Groot, T. Zick, F.M. Fornasini, G. Barro: The MOSDEF survey: towards a complete census of the *z* 2.3 star-forming galaxy population. *Mon. Not. R. Astron. Soc.* 517, 3, 4337-4354 (2022).

Runco J.N., N.A. Reddy, A.E. Shapley, C.C. Steidel, R.L. Sanders, A.L. Strom, A.L. Coil, M. Kriek, B. Mobasher, M. Pettini, G.C. Rudie, B. Siana, M.W. Topping, R.F. Trainor, W.R. Freeman, I. Shivaie, M. Azadi, S.H. Price, G.C. Leung, T. Fetherolf, L. de Groot, T. Zick, F.M. Fornasini, G. Barro: Reconciling the results of the *z* 2 MOSDEF and KBSS-MOSFIRE Surveys. *Mon. Not. R. Astron. Soc.* 513, 3, 3871-3892 (2022).

Russell H., P. Nulsen, D. Caprioli, U. Chadayammuri, A. Fabian, M. Kunz, B. McNamara, J. Sanders, A. Richard-Laferrrière, M. Beleznyay, R. Canning, J. Hlavacek-Larrondo, L. King: The structure of cluster merger shocks: turbulent width and the electron heating time-scale. *Mon. Not. R. Astron. Soc.* 514, 1, 1477-1493 (2022).

Rybarczyk D.R., M. Gong, S. Stanimirović, B. Babler, C.E. Murray, J.M. Winters, G. Luo, T. Dame, L. Steffes: The Role of Neutral Hydrogen in Setting the Abundances of Molecular Species in the Milky Way's Diffuse Interstellar Medium. II. Comparison between Observations and Theoretical Models. *Ap. J.* 926, 2 (2022).

Rybarczyk D.R., S. Stanimirović, M. Gong, B. Babler, C.E. Murray, M. Gerin, J.M. Winters, G. Luo, T. Dame, L. Steffes: The Role of Neutral Hydrogen in Setting the Abundances of Molecular Species in the Milky Way's Diffuse Interstellar Medium. I. Observational Constraints from ALMA and NOEMA. *Ap. J.* 928, 1 (2022).

Sabatini G., S. Bovino, P. Sanhueza, K. Morii, S. Li, E. Redaelli, Q. Zhang, X. Lu, S. Feng, D. Tafuya, N. Izumi, T. Sakai, K. Tatematsu, D. Allingham: The ALMA Survey of 70 μ m Dark High-mass Clumps in Early Stages (ASHES). VI. The Core-scale CO Depletion. *Ap. J.* 936, 1 (2022).

Saeedi S., T. Liu, J. Knies, M. Sasaki, W. Becker, E. Bulbul, K. Dennerl, M. Freyberg, R. Laktionov, A. Merloni: eROSLTA study of the globular cluster 47 Tucanae. *Astron. Astrophys.* 661, A35 (2022).

Saha T., A.G. Markowitz, J. Buchner: Inferring the mor-

phology of AGN torus using X-ray spectra: a reliability study. *Mon. Not. R. Astron. Soc.* 509, 4, 5485-5510 (2022).

Saito T., S. Takano, N. Harada, T. Nakajima, E. Schinnerer, D. Liu, A. Taniguchi, T. Izumi, Y. Watanabe, K. Bamba, E. Herbst, K. Kohno, Y. Nishimura, S. Stuber, Y. Tamura, T. Tosaki: The Kiloparsec-scale Neutral Atomic Carbon Outflow in the Nearby Type 2 Seyfert Galaxy NGC 1068: Evidence for Negative AGN Feedback. *Ap. J. Lett.* 927, 2, L32 (2022).

Saito T., S. Takano, N. Harada, T. Nakajima, E. Schinnerer, D. Liu, A. Taniguchi, T. Izumi, Y. Watanabe, K. Bamba, K. Kohno, Y. Nishimura, S. Stuber, T. Tosaki: AGN-driven Cold Gas Outflow of NGC 1068 Characterized by Dissociation-sensitive Molecules. *Ap. J.* 935, 2 (2022).

Salvati L., A. Saro, S. Bocquet, M. Costanzi, B. Ansarinejad, B. Benson, L. Bleem, M. Calzadilla, J. Carlstrom, C. Chang, R. Chown, A. Crites, T.d. Haan, M. Dobbs, W. Everett, B. Floyd, S. Grandis, E. George, N. Halverson, G. Holder, W. Holzzapfel, J. Hrubes, A. Lee, D. Luong-Van, M. McDonald, J. McMahon, S. Meyer, M. Millea, L. Mocanu, J. Mohr, T. Natoli, Y. Omori, S. Padin, C. Pryke, C. Reichardt, J. Ruhl, F. Ruppin, K. Schaffer, T. Schrabback, E. Shirokoff, Z. Staniszewski, A. Stark, J. Vieira, R. Williamson: Combining Planck and SPT Cluster Catalogs: Cosmological Analysis and Impact on the Planck Scaling Relation Calibration. *Ap. J.* 934, 2 (2022).

Salvato M., J. Wolf, T. Dwelly, A. Georgakakis, M. Brusa, A. Merloni, T. Liu, Y. Toba, K. Nandra, G. Lamer, J. Buchner, C. Schneider, S. Freund, A. Rau, A. Schwöpe, A. Nishizawa, M. Klein, R. Arcodia, J. Comparat, B. Musimenta, T. Nagao, H. Brunner, A. Malyali, A. Finoguenov, S. Anderson, Y. Shen, H. Ibarra-Medel, J. Trump, W. Brandt, C. Urry, C. Rivera, M. Krumpke, T. Urrutia, T. Miyaji, K. Ichikawa, D. Schneider, A. Fresco, T. Boller, J. Haase, J. Brownstein, R. Lane, D. Bizyaev, C. Nitschelm: The eROSITA Final Equatorial-Depth Survey (eFEDS). Identification and characterization of the counterparts to point-like sources. *Astron. Astrophys.* 661, A3 (2022).

Sánchez A.G., A.N. Ruiz, J.G. Jara, N.D. Padilla: Evolution mapping: a new approach to describe matter clustering in the non-linear regime. *Mon. Not. R. Astron. Soc.* 514, 4, 5673-5685 (2022).

Sánchez C., J. Prat, G. Zacharegkas, S. Pandey, E. Baxter, G. Bernstein, J. Blazek, R. Cawthon, C. Chang, E. Krause, P. Lemos, Y. Park, M. Raveri, J. Sanchez, M. Troxel, A. Amon, X. Fang, O. Friedrich, D. Gruen, A. Porredon, L. Seco, S. Samuroff, A. Alarcon, O. Alves, F. Andrade-Oliveira, K. Bechtol, M. Becker, H. Camacho, A. Campos, A. Carnero Rosell, M. Carrasco Kind, R. Chen, A. Choi, M. Crocce, C. Davis, J. De Vicente, J. DeRose, E. Di Valentino, H. Diehl, S. Dodelson, C. Doux, A. Drlica-Wagner, K. Eckert, T. Eifler, F. Elsner, J. Elvin-Poole, S. Everett, A. Ferté, P. Fosalba, M. Gatti, G. Giannini, R. Gruendl, I. Harrison, W. Hartley, K. Herner, E. Huff, D. Huterer, M. Jarvis, B. Jain, N. Kuropatkin, P. Leget, N. MacCrann, J. McCullough, J. Muir, J. Myles, A. Navarro-Alsina, R. Rollins, A. Roodman, R. Rosenfeld, E. Rykoff, I. Sevilla-Noarbe, E. Sheldon, T. Shin, A. Troja, I. Tutusaus, T. Varga, R. Wechsler, B. Yanny,

B. Yin, Y. Zhang, J. Zuntz, T. Abbott, M. Aguena, S. Allam, D. Bacon, E. Bertin, S. Bhargava, D. Brooks, E. Buckley-Geer, D. Burke, J. Carretero, M. Costanzi, L. da Costa, M. Pereira, S. Desai, J. Dietrich, P. Doel, A. Evrard, I. Ferrero, B. Flaugher, J. Frieman, J. García-Bellido, E. Gaztanaga, D. Gerdes, T. Giannantonio, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, B. Hoyle, D. James, K. Kuehn, O. Lahav, M. Lima, H. Lin, M. Maia, J. Marshall, P. Martini, P. Melchior, F. Menanteau, R. Miquel, J. Mohr, R. Morgan, A. Palmese, F. Paz-Chinchón, D. Petravick, A. Pieres, A. Plazas Malagón, M. Rodriguez-Monroy, E. Sanchez, V. Scarpine, M. Schubnell, S. Serrano, M. Smith, M. Soares-Santos, E. Suchyta, M. Swanson, G. Tarle, D. Thomas, C. To, DES Collaboration: Dark Energy Survey Year 3 results: Exploiting small-scale information with lensing shear ratios. *Physical Review D* 105, 8 (2022).

Sanders J., V. Biffi, M. Brüggen, E. Bulbul, K. Dennerl, K. Dolag, T. Erben, M. Freyberg, E. Gatuzz, V. Ghirardini, D. Hoang, M. Klein, A. Liu, A. Merloni, F. Pacaud, M.E. Ramos-Ceja, T. Reiprich, J. ZuHone: Studying the merging cluster Abell 3266 with eROSITA. *Astron. Astrophys.* 661, A36 (2022).

Santoro F., K. Kreckel, F. Belfiore, B. Groves, E. Congiu, D.A. Thilker, G.A. Blanc, E. Schinnerer, I. Ho, J.D. Kruijssen, S. Meidt, R.S. Klessen, A. Schrubba, M. Querejeta, I. Pessa, M. Chevance, J. Kim, E. Emsellem, R. McElroy, A.T. Barnes, F. Bigiel, M. Boquien, D.A. Dale, S.C. Glover, K. Grasha, J. Lee, A.K. Leroy, H. Pan, E. Rosolowsky, T. Saito, P. Sanchez-Blazquez, E.J. Watkins, T.G. Williams: PHANGS-MUSE: The H II region luminosity function of local star-forming galaxies. *Astron. Astrophys.* 658, A188 (2022).

Santos D.J.D., T. Goto, T. Hashimoto, S.J. Kim, T. Lu, Y.V. Wong, S.C. Ho, T.Y. Hsiao: Can luminous Lyman alpha emitters at $z \sim 5.7$ and $z \sim 6.6$ suppress star formation?. *Mon. Not. R. Astron. Soc.* 516, 4, 5601-5610 (2022).

Sarkar A., S. Randall, Y. Su, G.E. Alvarez, C. Sarazin, P. Nulsen, E. Blanton, W. Forman, C. Jones, E. Bulbul, J. Zuhone, F. Andrade-Santos, R.E. Johnson, P. Chakraborty: Discovery of a Premerger Shock in an Intercluster Filament in Abell 98. *Ap. J. Lett.* 935, 2, L23 (2022).

Sarkar K.C., A. Sternberg, O. Gnat: Self-ionizing Galactic Winds. *Ap. J.* 940, 1 (2022).

Sasaki M., J. Knies, F. Haberl, C. Maitra, J. Kerp, A.M. Bykov, K. Dennerl, M.D. Filipović, M. Freyberg, B.S. Koribalski, S. Points, L. Staveley-Smith: First studies of the diffuse X-ray emission in the Large Magellanic Cloud with eROSITA. *Astron. Astrophys.* 661, A37 (2022).

Schallmoser S., S. Krippendorff, F. Chadha-Day, J. Weller: Updated bounds on axion-like particles from X-ray observations. *Mon. Not. R. Astron. Soc.* 514, 1, 329-341 (2022).

Scheuermann F., K. Kreckel, G.S. Anand, G.A. Blanc, E. Congiu, F. Santoro, S.D. Van Dyk, A.T. Barnes, F. Bigiel, S.C. Glover, B. Groves, R.S. Klessen, J.D. Kruijssen, E. Rosolowsky, E. Schinnerer, A. Schrubba, E.J. Watkins, T.G. Williams: Planetary nebula luminosity function distances for 19 galaxies observed by PHANGS-MUSE. *Mon. Not. R. Astron. Soc.* 511, 4, 6087-6109 (2022).

- Schmid P.C., S. Thorwirth, C.P. Endres, M. Töpfer, Á. Sánchez-Monge, A. Schwörer, P. Schilke, S. Schlemmer, O. Asvany: Rotational Rest Frequencies and First Astronomical Search for Protonated Methylamine. *Frontiers in Astronomy and Space Sciences* 8 (2022).
- Schneider P., S. Freund, S. Czesla, J. Robrade, M. Salvato, J. Schmitt: The eROSITA Final Equatorial-Depth Survey (eFEDS). The Stellar Counterparts of eROSITA sources identified by machine learning and Bayesian algorithms. *Astron. Astrophys.* 661, A6 (2022).
- Schwöpe A., A.M. Pires, J. Kurpas, V. Doroshenko, V.F. Suleimanov, M. Freyberg, W. Becker, K. Dennerl, F. Haberl, G. Lamer, C. Maitra, A.Y. Potekhin, M.E. Ramos-Ceja, A. Santangelo, I. Traulsen, K. Werner: Phase-resolved X-ray spectroscopy of PSR B0656+14 with SRG/eROSITA and XMM-Newton. *Astron. Astrophys.* 661, A41 (2022).
- Schwöpe A., D.A. Buckley, A. Kawka, O. König, A. Lutovinov, C. Maitra, I. Mereminskiy, J. Miller-Jones, M. Pichardo Marcano, A. Rau, A. Semena, L.J. Townsend, J. Wilms: Identification of SRGt 062340.2-265751 as a bright, strongly variable, novalike cataclysmic variable. *Astron. Astrophys.* 661, A42 (2022).
- Schwöpe A., D.A. Buckley, A. Malyali, S. Potter, O. König, R. Arcodia, M. Gromadzki, A. Rau: Discovery of eRASST J192932.9-560346: A bright, two-pole accreting, eclipsing polar. *Astron. Astrophys.* 661, A43 (2022).
- Secco L., M. Jarvis, B. Jain, C. Chang, M. Gatti, J. Frieman, S. Adhikari, A. Alarcon, A. Amon, K. Bechtol, M. Becker, G. Bernstein, J. Blazek, A. Campos, A. Carnero Rosell, M. Carrasco Kind, A. Choi, J. Cordero, J. DeRose, S. Dodelson, C. Doux, A. Drlica-Wagner, S. Everett, G. Giannini, D. Gruen, R. Gruendl, I. Harrison, W. Hartley, K. Herner, E. Krause, N. MacCrann, J. McCullough, J. Myles, A. Navarro-Alsina, J. Prat, R. Rollins, S. Samuroff, C. Sánchez, I. Sevilla-Noarbe, E. Sheldon, M. Troxel, D. Zeurcher, M. Aguena, F. Andrade-Oliveira, J. Annis, D. Bacon, E. Bertin, S. Bocquet, D. Brooks, D. Burke, J. Carretero, F. Castander, M. Crocce, L. da Costa, M. Pereira, J. De Vicente, H. Diehl, P. Doel, K. Eckert, I. Ferrero, B. Flaugher, D. Friedel, J. García-Bellido, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. Huterer, K. Kuehn, N. Kuropatkin, M. Maia, J. Marshall, F. Menanteau, R. Miquel, J. Mohr, R. Morgan, J. Muir, F. Paz-Chinchón, A. Pieres, A. Plazas Malagón, M. Rodríguez-Monroy, A. Roodman, E. Sanchez, S. Serrano, E. Suchyta, M. Swanson, G. Tarle, D. Thomas, C. To, J. Weller, DES Collaboration: Dark Energy Survey Year 3 Results: Three-point shear correlations and mass aperture moments. *Physical Review D* 105, 10 (2022).
- Secco L., S. Samuroff, E. Krause, B. Jain, J. Blazek, M. Raveri, A. Campos, A. Amon, A. Chen, C. Doux, A. Choi, D. Gruen, G. Bernstein, C. Chang, J. DeRose, J. Myles, A. Ferté, P. Lemos, D. Huterer, J. Prat, M. Troxel, N. MacCrann, A. Liddle, T. Kacprzak, X. Fang, C. Sánchez, S. Pandey, S. Dodelson, P. Chintalapati, K. Hoffmann, A. Alarcon, O. Alves, F. Andrade-Oliveira, E. Baxter, K. Bechtol, M. Becker, A. Brandao-Souza, H. Camacho, A. Carnero Rosell, M. Carrasco Kind, R. Cawthon, J. Cordero, M. Crocce, C. Davis, E. Di Valentino, A. Drlica-Wagner, K. Eckert, T. Eifler, M. Elidaiana, F. Elsner, J. Elvin-Poole, S. Everett, P. Fos-alba, O. Friedrich, M. Gatti, G. Giannini, R. Gruendl, I. Harrison, W. Hartley, K. Herner, H. Huang, E. Huff, M. Jarvis, N. Jeffrey, N. Kuropatkin, P. Leget, J. Muir, J. McCullough, A. Navarro Alsina, Y. Omori, Y. Park, A. Porredon, R. Rollins, A. Roodman, R. Rosenfeld, A. Ross, E. Rykoff, J. Sanchez, I. Sevilla-Noarbe, E. Sheldon, T. Shin, A. Troja, I. Tutusaus, T. Varga, N. Weaverdyck, R. Wechsler, B. Yanny, B. Yin, Y. Zhang, J. Zuntz, T. Abbott, M. Aguena, S. Allam, J. Annis, D. Bacon, E. Bertin, S. Bhargava, S. Bridle, D. Brooks, E. Buckley-Geer, D. Burke, J. Carretero, M. Costanzi, L. da Costa, J. De Vicente, H. Diehl, J. Dietrich, P. Doel, I. Ferrero, B. Flaugher, J. Frieman, J. García-Bellido, E. Gaztanaga, D. Gerdes, T. Giannantonio, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, B. Hoyle, D. James, T. Jeltema, K. Kuehn, O. Lahav, M. Lima, H. Lin, M. Maia, J. Marshall, P. Martini, P. Melchior, F. Menanteau, R. Miquel, J. Mohr, R. Morgan, R. Ogando, A. Palmese, F. Paz-Chinchón, D. Petravick, A. Pieres, A. Plazas Malagón, M. Rodríguez-Monroy, A. Romer, E. Sanchez, V. Scarpine, M. Schubnell, D. Scolnic, S. Serrano, M. Smith, M. Soares-Santos, E. Suchyta, M. Swanson, G. Tarle, D. Thomas, C. To, DES Collaboration: Dark Energy Survey Year 3 results: Cosmology from cosmic shear and robustness to modeling uncertainty. *Physical Review D* 105, 2 (2022).
- Semenaitė A., A.G. Sánchez, A. Pezzotta, J. Hou, R. Scocimarro, A. Eggemeier, M. Crocce, C. Chuang, A. Smith, C. Zhao, J.R. Brownstein, G. Rossi, D.P. Schneider: Cosmological implications of the full shape of anisotropic clustering measurements in BOSS and eBOSS. *Mon. Not. R. Astron. Soc.* 512, 4, 5657-5670 (2022).
- Seppi R., J. Comparat, E. Bulbul, K. Nandra, A. Merloni, N. Clerc, T. Liu, V. Ghirardini, A. Liu, M. Salvato, J. Sanders, J. Wilms, T. Dwelly, T. Dauser, O. König, M.E. Ramos-Ceja, C. Garrel, T. Reiprich: Detecting clusters of galaxies and active galactic nuclei in an eROSITA all-sky survey digital twin. *Astron. Astrophys.* 665, A78 (2022).
- Šerkšnytė, L., S. Königstorfer, P. von Doetinchem, L. Fabbietti, D.M. Gomez-Coral, J. Herms, A. Ibarra, T. Pöschl, A. Shukla, A. Strong, & I. Vorobyev: Reevaluation of the cosmic antideuteron flux from cosmic-ray interactions and from exotic sources. *Physical Review D* 105, 8 (2022).
- Shah E.A., J.S. Kartaltepe, C.T. Magagnoli, I.G. Cox, C.T. Wetherell, B.N. Vanderhoof, K.C. Cooke, A. Calabro, N. Chartab, C.J. Conselice, D.J. Croton, A. de la Vega, N.P. Hathi, O. Ilbert, H. Inami, D.D. Kocevski, A.M. Koekemoer, B.C. Lemaux, L. Lubin, K.B. Mantha, S. Marchesi, M. Martig, J. Moreno, B.A. Pampiega, D.R. Patton, M. Salvato, E. Treister: Investigating the Effect of Galaxy Interactions on Star Formation at $0.5 < z < 3.0$. *Ap. J.* 940, 1 (2022).
- Shapley A.E., R.L. Sanders, S. Salim, N.A. Reddy, M. Kriek, B. Mobasher, A.L. Coil, B. Siana, S.H. Price, I. Shivaeei, J.S. Dunlop, R.J. McLure, F. Cullen: The MOSFIRE Deep Evolution Field Survey: Implications of the Lack of Evolution in the Dust Attenuation-Mass Relation to $z > 2$. *Ap. J.* 926, 2 (2022).
- Shingledecker, C. N., T. Banu, Y. Kang, H. Wei, J. Wandishin, G. Nobis, V. Jarvis, F. Quinn, G. Quinn, G. Molpeceres, M.C. McCarthy, B.A. McGuire, A.J. Kästner: Grain-surface hydrogen-addition reactions as a chemi-

cal link between cold cores and hot corinos: the case of H₂CCS and CH₃CH₂SH. *Journal of Physical Chemistry A*, 126, 32, 5343-5353 (2022).

Shu X., L. Yang, D. Liu, W. Wang, T. Wang, Y. Han, X. Huang, C. Lim, Y. Chang, W. Zheng, X. Zheng, J. Wang, X. Kong: A Census of Optically Dark Massive Galaxies in the Early Universe from Magnification by Lensing Galaxy Clusters. *Ap. J.* 926, 2 (2022).

Sicilian D., D. Lopez, M. Moschetti, E. Bulbul, N. Cappelluti: Constraining Sterile Neutrino Dark Matter in the Milky Way Halo with Swift-XRT. *Ap. J.* 941, 1 (2022).

Sicilian D., F. Civano, N. Cappelluti, J. Buchner, A. Peca: X-Ray Redshifts of Obscured Chandra Source Catalog Active Galactic Nuclei. *Ap. J.* 936, 1 (2022).

Siegert T., C. Boehm, F. Calore, R. Diehl, M.G. Krause, P.D. Serpico, A.C. Vincent: An INTEGRAL/SPI view of reticulum II: particle dark matter and primordial black holes limits in the MeV range. *Mon. Not. R. Astron. Soc.* 511, 1, 914-924 (2022).

Siegert T., J. Berteaud, F. Calore, P.D. Serpico, C. Weinberger: Diffuse Galactic emission spectrum between 0.5 and 8.0 MeV. *Astron. Astrophys.* 660, A130 (2022).

Silsbee K., V. Akimkin, A.V. Ivlev, L. Testi, M. Gong, P. Caselli: Dust Grains Cannot Grow to Millimeter Sizes in Protostellar Envelopes. *Ap. J.* 940, 2 (2022).

Sinigaglia F., G. Rodighiero, E. Elson, M. Vaccari, N. Maddox, B.S. Frank, M.J. Jarvis, T. Oosterloo, R. Davé, M. Salvato, M. Baes, S. Bellstedt, L. Bisigello, J.D. Collier, R.H. Cook, L.J. Davies, J. Delhaize, S.P. Driver, C. Foster, S. Kurapati, C.d.P. Lagos, C. Lidman, P.E. Mancera Piña, M.J. Meyer, K.M. Mogotsi, H. Pan, A.A. Ponomareva, I. Prandoni, S.H. Rajohnson, A.S. Robotham, M.G. Santos, S. Sekhar, K. Spekkens, J.E. Thorne, J.M. van der Hulst, O.I. Wong: MIGHTEE-HI: Evolution of HI Scaling Relations of Star-forming Galaxies at $z < 0.5$. *Ap. J. Lett.* 935, 1, L13 (2022).

Sipilä O., P. Caselli, E. Redaelli, S. Spezzano: Chemistry and dynamics of the prestellar core L1544. *Astron. Astrophys.* 668, A131 (2022).

Smethurst R.J., K.L. Masters, B.D. Simmons, I.L. Garland, T. Géron, B. Häußler, S. Kruk, C.J. Lintott, D. O’Ryan, M. Walmsley: Quantifying the poor purity and completeness of morphological samples selected by galaxy colour. *Mon. Not. R. Astron. Soc.* 510, 3 (2022).

Somboonpanyakul T., M. McDonald, A. Noble, M. Agüena, S. Allam, A. Amon, F. Andrade-Oliveira, D. Bacon, M. Bayliss, E. Bertin, S. Bhargava, D. Brooks, E. Buckley-Geer, D. Burke, M. Calzadilla, R. Canning, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, M. Costanzi, L. da Costa, M. Pereira, J. De Vicente, P. Doel, P. Eisenhardt, S. Everett, A. Evrard, I. Ferrero, B. Flaugher, B. Floyd, J. García-Bellido, E. Gaztanaga, D. Gerdes, A. Gonzalez, D. Gruen, R. Gruendl, J. Gschwend, N. Gupta, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, B. Hoyle, D. James, T. Jeltema, G. Khullar, K. Kim, M. Klein, K. Kuehn, M. Lima, M. Maia, J. Marshall, P. Martini, P. Melchior, F.

Menanteau, R. Miquel, J. Mohr, R. Morgan, R. Ogando, A. Palmese, F. Paz-Chinchón, A. Pieres, A. Plazas Malagón, K. Reil, A. Romer, F. Ruppin, E. Sanchez, A. Saro, V. Scarpine, M. Schubnell, S. Serrano, I. Sevilla-Noarbe, P. Singh, M. Smith, M. Soares-Santos, V. Strazzullo, E. Suchyta, M. Swanson, G. Tarle, C. To, D. Tucker, R. Wilkinson: The Evolution of AGN Activity in Brightest Cluster Galaxies. *Astron. J.* 163, 4 (2022).

Sormani M.C., J.L. Sanders, T.K. Fritz, L.C. Smith, O. Gerhard, R. Schödel, J. Magorrian, N. Neumayer, F. Nogueras-Lara, A. Feldmeier-Krause, A. Mastrobuono-Battisti, M. Schultheis, B. Shahzamanian, E. Vasiliev, R.S. Klessen, P. Lucas, D. Minniti: Self-consistent modelling of the Milky Way’s nuclear stellar disc. *Mon. Not. R. Astron. Soc.* 512, 2, 1857-1884 (2022).

Sormani M.C., O. Gerhard, M. Portail, E. Vasiliev, J. Clarke: The stellar mass distribution of the Milky Way’s bar: an analytical model. *Mon. Not. R. Astron. Soc.* 514, 1, L1-L5 (2022).

Spavone, M., E. Iodice, G. D’Ago, G. van de Ven, L. Morelli, E.M. Corsini, M. Sarzi, L. Coccato, K. Fahrion, J. Falcón-Barroso, D.A. Gadotti, M. Lyubenova, I. Martín-Navarro, R.M. McDermid, F. Pinna, A. Pizzella, A. Poci, P.T. de Zeeuw, & L. Zhu: Fornax3D project: Assembly history of massive early-type galaxies in the Fornax cluster from deep imaging and integral field spectroscopy. *Astron. Astrophys.* 663, A135 (2022).

Speedie J., R.E. Pudritz, A. Cridland, F. Meru, R.A. Booth: Turbulent disc viscosity and the bifurcation of planet formation histories. *Mon. Not. R. Astron. Soc.* 510, 4 (2022).

Spezzano S., A. Fuente, P. Caselli, A. Vasyunin, D. Navarro-Almáida, M. Rodríguez-Baras, A. Punanova, C. Vastel, V. Wakelam: Gas phase Elemental abundances in Molecular cloudS (GEMS) V. Methanol in Taurus. *Astron. Astrophys.* 657, A10 (2022).

Spezzano S., O. Sipilä, P. Caselli, S. Jensen, S. Czakli, L. Bizzocchi, J. Chantzios, G. Esplugues, A. Fuente, F. Eisenhauer: H₂CS deuteration maps towards the pre-stellar core L1544. *Astron. Astrophys.* 661, A111 (2022).

Spezzano S., P. Caselli, O. Sipilä, L. Bizzocchi: Nitrogen fractionation towards a pre-stellar core traces isotope-selective photodissociation. *Astron. Astrophys.* 664, L2 (2022).

Šrámková, E., M. Matuszková, K. Klimovičová, J. Horák, O. Straub, G. Urbanová, M. Urbanec, V. Karas, G. Török, D. Lančová: Oscillations of fluid tori around neutron stars. *Astronomische Nachrichten*, e20220114 (2022).

Stapper L., M. Hogerheijde, E. F. van Dishoeck, R. Mentel: The mass and size of Herbig disks as seen by ALMA. *Astron. Astrophys.* 658, A112 (2022).

Stapper L., M. Hogerheijde, E. F. van Dishoeck, R. Mentel: The mass and size of Herbig disks as seen by ALMA (Corrigendum). *Astron. Astrophys.* 667, C1 (2022).

Steinwandel U.P., K. Dolag, H. Lesch, A. Burkert: Driving Galactic Outflows with Magnetic Fields at Low and High Redshift. *Ap. J.* 924, 1 (2022).

- Stelzer B., A. Klutsch, M. Coffaro, E. Magaudda, M. Salvato: A first eROSITA view of ultracool dwarfs. *Astron. Astrophys.* 661, A44 (2022).
- Sturm J., M. McClure, D. Harsono, S. Facchini, F. Long, M. Kama, E. Bergin, E. F. van Dishoeck: Tracing pebble drift and trapping using radial carbon depletion profiles in protoplanetary disks. *Astron. Astrophys.* 660, A126 (2022).
- Suess K.A., R. Bezanson, E.J. Nelson, D.J. Setton, S.H. Price, P.v. Dokkum, G. Brammer, I. Labbé, J. Leja, T.B. Miller, B. Robertson, A.v.d. Wel, J.R. Weaver, K.E. Whitaker: Rest-frame Near-infrared Sizes of Galaxies at Cosmic Noon: Objects in JWST's Mirror Are Smaller than They Appeared. *Ap. J. Lett.* 937, 2 (2022).
- Sugizaki M., T. Mihara, K. Kobayashi, H. Negoro, M. Shidatsu, S.N. Pike, W. Iwakiri, S. Urabe, M. Serino, N. Kawai, M. Nakajima, J.A. Kennea, Z. Liu: Discovery of a new supergiant fast X-ray transient MAXI J0709-159 associated with the Be star LY Canis Majoris. *Publ. Astron. Soc. Jpn.* 74, 5 (2022).
- Sun F., E. Egami, S. Fujimoto, T. Rawle, F.E. Bauer, K. Kohno, I. Smail, P.G. Pérez-González, Y. Ao, S.C. Chapman, F. Combes, M. Dessauges-Zavadsky, D. Espada, J. González-López, A.M. Koekemoer, V. Kokorev, M.M. Lee, K. Morokuma-Matsui, A.M. Muñoz Arancibia, M. Oguri, R. Pelló, Y. Ueda, R. Uematsu, F. Valentino, P. Van der Werf, G.L. Walth, M. Zemcov, A. Zitrin: ALMA Lensing Cluster Survey: ALMA-Herschel Joint Study of Lensed Dusty Star-forming Galaxies across $z \sim 0.5 - 6$. *Ap. J.* 932, 2 (2022).
- Sun H., H. Liu, H. Pan, Z. Liu, D. Alp, J. Hu, Z. Li, B. Zhang, W. Yuan: Luminosity Function and Event Rate Density of XMM-Newton-selected Supernova Shock Breakout Candidates. *Ap. J.* 927, 2 (2022).
- Sun J., A.K. Leroy, E. Rosolowsky, A. Hughes, E. Schinnerer, A. Schrubba, E.W. Koch, G.A. Blanc, I. Chiang, B. Groves, D. Liu, S. Meidt, H. Pan, J. Pety, M. Querejeta, T. Saito, K. Sandstrom, A. Sardone, A. Usero, D. Utomo, T.G. Williams, A.T. Barnes, S.M. Benincasa, F. Bigiel, A.D. Bolatto, M. Boquien, M. Chevance, D.A. Dale, S. Deger, E. Emsellem, S.C. Glover, K. Grasha, J.D. Henshaw, R.S. Klessen, K. Kreckel, J.D. Kruijssen, E.C. Ostriker, D.A. Thilker: Molecular Cloud Populations in the Context of Their Host Galaxy Environments: A Multiwavelength Perspective. *Astron. J.* 164, 2 (2022).
- Svinkin D., K. Hurley, A. Ridnaia, A. Lysenko, D. Frederiks, S. Golenetskii, A. Tsvetkova, M. Ulanov, A. Kokomov, T. Cline, I. Mitrofanov, D. Golovin, A. Kozyrev, M. Litvak, A. Sanin, A. Goldstein, M. Briggs, C. Wilson-Hodge, E. Burns, A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, A. Tohuvavohu, K. Yamaoka, M. Ohno, Y. Fukazawa, Y. Hanabata, T. Takahashi, M. Tashiro, Y. Terada, T. Murakami, K. Makishima, W. Boynton, C. Fellows, K. Harshman, H. Enos, R. Starr, J. Goldsten, R. Gold, A. Ursi, M. Tavani, A. Bulgarelli, C. Casentini, E. Del Monte, Y. Evangelista, M. Galli, F. Longo, M. Marisaldi, N. Parmigiani, C. Pittori, M. Romani, F. Verrecchia, D. Smith, W. Hajdas, S. Xiao, C. Cai, Q. Yi, Y. Zhang, S. Xiong, X. Li, Y. Huang, C. Li, S. Zhang, L. Song, C. Liu, X. Li, W. Peng, I. Martinez-Castellanos: The Second Catalog of Interplanetary Network Localizations of Konus Short-duration Gamma-Ray Bursts. *Ap. J. Supp. Ser.* 259, 2 (2022).
- Szakacs R., C. Péroux, M.A. Zwaan, D. Nelson, E. Schinnerer, N. Lahén, S. Weng, A.Y. Fresco: The column densities of molecular gas across cosmic time: bridging observations and simulations. *Mon. Not. R. Astron. Soc.* 512, 4, 4736-4751 (2022).
- Tabone B., G. Rosotti, G. Lodato, P. Armitage, A. Cridland, E. F. van Dishoeck: MHD disc winds can reproduce fast disc dispersal and the correlation between accretion rate and disc mass in Lupus. *Mon. Not. R. Astron. Soc.* 512, 1 (2022).
- Tabone B., G.P. Rosotti, A.J. Cridland, P.J. Armitage, G. Lodato: Secular evolution of MHD wind-driven discs: analytical solutions in the expanded α -framework. *Mon. Not. R. Astron. Soc.* 512, 2 (2022).
- Tahmasebzadeh B., L. Zhu, J. Shen, O. Gerhard, G. v.d.Ven: Orbit-superposition Dynamical Modeling of Barred Galaxies. *Ap. J.* 941, 2, 109 (2022).
- Tanyag, R. M. P., C. Bacellar, W. Pang, C. Bernando, L.F. Gomez, C. F. Jones, K.R. Ferguson, J. Kwok, D. Anielski, A. Belkacem, R. Boll, J. Bozek, S. Carron, G. Chen, T. Delmas, L. Englert, S.W. Epp, B. Erk, L. Foucar, R. Hartmann, A. Hexemer, M. Huth, S. R. Leone, J. H. Ma, S. Marchesini, D. M. Neumark, B. K. Poon, J. Prell, D. Rolles, B. Rudek, A. Rudenko, M. Seifrid, M. Swiggers, J. Ullrich, F. Weise, P. Zwart, C. Bostedt, O. Gessner, & A. F. Vilesov: Sizes of pure and doped helium droplets from single shot x-ray imaging. *The Journal of Chemical Physics*, 156, 4 (2022).
- Tavangar K., P. Ferguson, N. Shipp, A. Drlica-Wagner, S. Koposov, D. Erkal, E. Balbinot, J. García-Bellido, K. Kuehn, G. Lewis, T. Li, S. Mau, A. Pace, A. Riley, T. Abbott, M. Aguena, S. Allam, F. Andrade-Oliveira, J. Annis, E. Bertin, D. Brooks, D. Burke, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, M. Costanzi, L. da Costa, M. Pereira, J. De Vicente, H. Diehl, S. Everett, I. Ferrero, B. Flaugher, J. Frieman, E. Gaztanaga, D. Gerdes, D. Gruen, R. Gruendl, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. James, N. Kuropatkin, M. Maia, J. Marshall, F. Menanteau, R. Miquel, R. Morgan, R. Ogando, A. Palmese, F. Paz-Chinchón, A. Pieres, A. Plazas Malagón, M. Rodriguez-Monroy, E. Sanchez, V. Scarpine, S. Serrano, I. Sevilla-Noarbe, M. Smith, E. Suchyta, M. Swanson, G. Tarle, C. To, T. Varga, A. Walker: From the Fire: A Deeper Look at the Phoenix Stream. *Ap. J.* 925, 2 (2022).
- Teng Y., K.M. Sandstrom, J. Sun, A.K. Leroy, L.C. Johnson, A.D. Bolatto, J.D. Kruijssen, A. Schrubba, A. Usero, A.T. Barnes, F. Bigiel, G.A. Blanc, B. Groves, F.P. Israel, D. Liu, E. Rosolowsky, E. Schinnerer, J. Smith, F. Walter: Molecular Gas Properties and CO-to-H₂ Conversion Factors in the Central Kiloparsec of NGC 3351. *Ap. J.* 925, 1 (2022).
- Thater S., P. Jethwa, B. Tahmasebzadeh, L. Zhu, M. den Brok, G. Santucci, Y. Ding, A. Poci, E. Lilley, P. Tim de Zeeuw, A. Zocchi, T.I. Maindl, F. Rigamonti, M. Yang, K.

Fahrion, G. van de Ven: Testing the robustness of DYNAMITE triaxial Schwarzschild modelling: The effects of correcting the orbit mirroring. *Astron. Astrophys.* 667, A51 (2022).

Thilker D.A., B.C. Whitmore, J.C. Lee, S. Deger, R. Chandar, K.L. Larson, S. Hannon, L. Ubeda, D.A. Dale, S.C. Glover, K. Grasha, R.S. Klessen, J.D. Kruijssen, E. Rosolowsky, A. Schrubba, R.L. White, T.G. Williams: PHANGS-HST: new methods for star cluster identification in nearby galaxies. *Mon. Not. R. Astron. Soc.* 509, 3 (2022).

Thomas J., M. Lipka: A simple data-driven method to optimize the penalty strengths of penalized models and its application to non-parametric smoothing. *Mon. Not. R. Astron. Soc.* 514, 4 (2022).

Thomas M., M. Trenti, J. Greiner, M. Skrutskie, D.A. Forbes, S. Klose, K. Mack, R. Mearns, B. Metha, E. Skafidas, G. Tagliaferri, N. Tanvir: SkyHopper mission science case I: Identification of high redshift Gamma-Ray Bursts through space-based near-infrared afterglow observations. *Publ. Astron. Soc. Australia.* 39 (2022).

Toba Y., T. Liu, T. Urrutia, M. Salvato, J. Li, Y. Ueda, M. Brusa, N. Yutani, K. Wada, A.J. Nishizawa, J. Buchner, T. Nagao, A. Merloni, M. Akiyama, R. Arcodia, B. Hsieh, K. Ichikawa, M. Imanishi, K.T. Inoue, T. Kawaguchi, G. Lamer, K. Nandra, J.D. Silverman, Y. Terashima: The eROSITA Final Equatorial-Depth Survey (eFEDS). A multiwavelength view of WISE mid-infrared galaxies/active galactic nuclei. *Astron. Astrophys.* 661, A15 (2022).

Tobin J.J., S.S. Offner, K.M. Kratter, S.T. Megeath, P.D. Sheehan, L.W. Looney, A.K. Diaz-Rodriguez, M. Osorio, G. Anglada, S.I. Sadavoy, E. Furlan, D. Segura-Cox, N. Karnath, M.L. van't Hoff, E.F. van Dishoeck, Z. Li, R. Sharma, A.M. Stutz, Ł. Tychoniec: The VLA/ALMA Nascent Disk And Multiplicity (VANDAM) Survey of Orion Protostars. V. A Characterization of Protostellar Multiplicity. *Ap. J.* 925, 1 (2022).

Tortosa A., C. Ricci, F. Tombesi, L.C. Ho, P. Du, K. Inayoshi, J. Wang, J. Shangquan, R. Li: The extreme properties of the nearby hyper-Eddington accreting active galactic nucleus in IRAS 04416+1215. *Mon. Not. R. Astron. Soc.* 509, 3 (2022).

Tortosa A., C. Ricci, L.C. Ho, F. Tombesi, P. Du, K. Inayoshi, J. Wang, J. Shangquan, R. Li: Systematic Broadband X-ray Study of super-Eddington Accretion onto Supermassive Black Holes. I. X-ray Continuum. *Mon. Not. R. Astron. Soc.* 519, 4, 6267-6283 (2022).

Tozzi P., L. Pentericci, R. Gilli, M. Pannella, F. Fiore, G. Miley, M. Nonino, H. Röttgering, V. Strazzullo, C. Anderson, S. Borgani, A. Calabrò, C. Carilli, H. Dannerbauer, L. Di Mascolo, C. Feruglio, R. Gobat, S. Jin, A. Liu, T. Mroczkowski, C. Norman, E. Rasia, P. Rosati, A. Saro: The 700 ks Chandra Spiderweb Field. I. Evidence for widespread nuclear activity in the protocluster. *Astron. Astrophys.* 662, A54 (2022).

Tozzi P., R. Gilli, A. Liu, S. Borgani, M. Lepore, L. Di Mascolo, A. Saro, L. Pentericci, C. Carilli, G. Miley, T. Mroczkowski, M. Pannella, E. Rasia, P. Rosati, C. Anderson,

A. Calabrò, E. Churazov, H. Dannerbauer, C. Feruglio, F. Fiore, R. Gobat, S. Jin, M. Nonino, C. Norman, H. Röttgering: The 700 ks Chandra Spiderweb Field. II. Evidence for inverse-Compton and thermal diffuse emission in the Spiderweb galaxy. *Astron. Astrophys.* 667, A134 (2022).

Trudu M., M. Pilia, G. Bernardi, A. Addis, G. Bianchi, A. Magro, G. Naldi, D. Pellicciari, G. Pupillo, G. Setti, C. Bortolotti, C. Casentini, D. Dallacasa, V. Gajjar, N. Locatelli, R. Lulli, G. Maccaferri, A. Mattana, D. Michilli, F. Perini, A. Possenti, M. Roma, M. Schiaffino, M. Tavani, F. Verrecchia: The northern cross fast radio burst project - II. Monitoring of repeating FRB 20180916B, 20181030A, 20200120E, and 20201124A. *Mon. Not. R. Astron. Soc.* 513, 2, 1858-1866 (2022).

Trudu, M., M. Trudu, M. Pilia, G. Bernardi, A. Addis, G. Bianchi, A. Magro, G. Naldi, D. Pellicciari, G. Pupillo, G. Setti, C. Bortolotti, C. Casentini, D. Dallacasa, V. Gajjar, N. Locatelli, R. Lulli, G. Maccaferri, A. Mattana, D. Michilli, F. Perini, A. Possenti, M. Roma, M. Schiaffino, M., Tavani, F. Verrecchia: he northern cross fast radio burst project - II. Monitoring of repeating FRB 20180916B, 20181030A, 20200120E, and 20201124A. *Mon. Not. R. Astron. Soc.* 513, 2, (2022).

Tu A.J., C. Zucker, J.S. Speagle, A. Beane, A. Goodman, J. Alves, J. Faherty, A. Burkert: Characterizing the 3D Kinematics of Young Stars in the Radcliffe Wave. *Ap. J.* 936, 1 (2022).

Tucker D., M. Wiesner, S. Allam, M. Soares-Santos, C. Bom, M. Butner, A. Garcia, R. Morgan, F. Olivares E., A. Palmese, L. Santana-Silva, A. Shrivastava, J. Annis, J. García-Bellido, M. Gill, K. Herner, C. Kilpatrick, M. Makler, N. Sherman, A. Amara, H. Lin, M. Smith, E. Swann, I. Arcavi, T. Bachmann, K. Bechtol, F. Berlfein, C. Briceño, D. Brout, R. Butler, R. Cartier, J. Casares, H. Chen, C. Conselice, C. Contreras, E. Cook, J. Cooke, K. Dage, C. D'Andrea, T. Davis, R. de Carvalho, H. Diehl, J. Dietrich, Z. Doctor, A. Drlica-Wagner, M. Drout, B. Farr, D. Finley, M. Fishbach, R. Foley, F. Förster-Burón, P. Fosalba, D. Friedel, J. Frieman, C. Frohmaier, R. Gruendl, W. Hartley, D. Hiramatsu, D. Holz, D. Howell, A. Kawash, R. Kessler, N. Kuropatkin, O. Lahav, A. Lundgren, M. Lundquist, U. Malik, A. Mann, J. Marriner, J. Marshall, C. Martínez-Vázquez, C. McCully, F. Menanteau, N. Meza, G. Narayan, E. Neilsen, C. Nicolaou, R. Nichol, F. Paz-Chinchón, M. Pereira, J. Pineda, S. Points, J. Quirola-Vásquez, S. Rembold, A. Rest, Ó. Rodríguez, A. Romer, M. Sako, S. Salim, D. Scolnic, J. Smith, J. Strader, M. Sullivan, M. Swanson, D. Thomas, S. Valenti, T. Varga, A. Walker, J. Weller, M. Wood, B. Yanny, A. Zenteno, M. Aguena, F. Andrade-Oliveira, E. Bertin, D. Brooks, D. Burke, A.C. Rosell, M.C. Kind, J. Carretero, M. Costanzi, L. da Costa, J. De Vicente, S. Desai, S. Everett, I. Ferrero, B. Flaugher, E. Gaztanaga, D. Gerdes, D. Gruen, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. James, K. Kuehn, M. Lima, M. Maia, R. Miquel, R. Ogando, A. Pieres, A. Plazas Malagón, M. Rodríguez-Monroy, E. Sanchez, V. Scarpine, M. Schubnell, S. Serrano, I. Sevilla-Noarbe, E. Suchyta, G. Tarle, C. To, Y. Zhang: SOAR/Goodman Spectroscopic Assessment of Candidate Counterparts of the LIGO/Virgo Event GW190814.

Ap. J. 929, 2 (2022).

Turner J.A., D.A. Dale, J. Lilly, M. Boquien, S. Deger, J.C. Lee, B.C. Whitmore, G.S. Anand, S.M. Benincasa, F. Bigiel, G.A. Blanc, M. Chevance, E. Emsellem, C.M. Faesi, S.C. Glover, K. Grasha, A. Hughes, R.S. Klessen, K. Kreckel, J.D. Kruijssen, A.K. Leroy, H. Pan, E. Rosolowsky, A. Schrubba, T.G. Williams: PHANGS: constraining star formation time-scales using the spatial correlations of star clusters and giant molecular clouds. *Mon. Not. R. Astron. Soc.* 516, 3, 4612-4626 (2022).

Uchiyama H., T. Yamashita, T. Nagao, K. Ichikawa, Y. Toba, S. Ishikawa, M. Kubo, M. Kajisawa, T. Kawaguchi, N. Kawakatu, C. Lee, A. Noboriguchi: A Wide and Deep Exploration of Radio Galaxies with Subaru HSC (WERGS). VII. Redshift Evolution of Radio Galaxy Environments at $z = 0.3-1.4$. *Ap. J.* 934, 1 (2022).

Uchiyama H., T. Yamashita, T. Nagao, Y. Ono, J. Toshikawa, K. Ichikawa, N. Kawakatu, M. Kajisawa, Y. Toba, Y. Matsuoka, M. Kubo, M. Imanishi, K. Ito, T. Kawaguchi, C. Lee, T. Saito: A Wide and Deep Exploration of Radio Galaxies with Subaru HSC (WERGS). IX. The most overdense region at $z \approx 5$ inhabited by a massive radio galaxy. *Publ. Astron. Soc. Jpn.* 74, 6, L27-L32 (2022).

Uchiyama M., K. Ichikawa, K. Sugiyama, Y. Tanabe, Y. Yonekura: Mid-infrared and Maser Flux Variability Correlation in Massive Young Stellar Object G036.70+00.09. *Ap. J.* 936, 1 (2022).

Upham R., M. Brown, L. Whittaker, A. Amara, N. Auricchio, D. Bonino, E. Branchini, M. Brescia, J. Brinchmann, V. Capobianco, C. Carbone, J. Carretero, M. Castellano, S. Cavuoti, A. Cimatti, R. Cledassou, G. Congedo, L. Conversi, Y. Copin, L. Corcione, M. Cropper, A. Da Silva, H. Degaudenzi, M. Douspis, F. Dubath, C. Duncan, X. Dupac, S. Dusini, A. Ealet, S. Farrens, S. Ferriol, P. Fosalba, M. Frailis, E. Franceschi, M. Fumana, B. Garilli, B. Gillis, C. Giocoli, F. Grupp, S. Haugan, H. Hoekstra, W. Holmes, F. Hormuth, A. Hornstrup, K. Jahnke, S. Kermiche, A. Kiessling, M. Kilbinger, T. Kitching, M. Kümmel, M. Kunz, H. Kurki-Suonio, S. Ligorì, P. Lilje, I. Lloro, O. Marggraf, K. Markovic, F. Marulli, M. Meneghetti, G. Meylan, M. Moresco, L. Moscardini, E. Munari, S. Niemi, C. Padilla, S. Paltani, F. Pasian, K. Pedersen, V. Pettorino, S. Pires, M. Poncet, L. Popa, F. Raison, J. Rhodes, E. Rossetti, R. Saglia, B. Sartoris, P. Schneider, A. Secroun, G. Seidel, C. Sirignano, G. Sirri, L. Stanco, J. Starck, P. Tallada-Crespí, D. Tavagnacco, A. Taylor, I. Tereno, R. Toledo-Moreo, F. Torradeflot, L. Valenziano, Y. Wang, G. Zamorani, J. Zoubian, S. Andreon, M. Baldi, S. Camera, V. Cardone, G. Fabbian, G. Polenta, A. Renzi, B. Joachimi, A. Hall, A. Loureiro, E. Sellentin: Euclid: Covariance of weak lensing pseudo- C_ℓ estimates. Calculation, comparison to simulations, and dependence on survey geometry. *Astron. Astrophys.* 660, A114 (2022).

Valdivia-Mena M., J. Pineda, D. Segura-Cox, P. Caselli, R. Neri, A. López-Sepulcre, N. Cunningham, L. Bouscasse, D. Semenov, T. Henning, V. Piétu, E. Chapillon, A. Dutrey, A. Fuente, S. Guilloteau, T. Hsieh, I. Jiménez-Serra, S. Marino, M. Maureira, G. Smirnov-Pinchukov, M. Tafalla, B.

Zhao: PRODIGE - envelope to disk with NOEMA. I. A 3000 au streamer feeding a Class I protostar. *Astron. Astrophys.* 667, A12 (2022).

Valegård P., C. Ginski, C. Dominik, J. Bae, M. Benisty, T. Birnstiel, S. Facchini, A. Garufi, M. Hogerheijde, R. van Holstein, M. Langlois, C. Manara, P. Pinilla, C. Rab, Á. Ribas, L. Waters, J. Williams: Disk Evolution Study Through Imaging of Nearby Young Stars (DESTINYs): Scattered light detection of a possible disk wind in RY Tau. *Astron. Astrophys.* 668, A25 (2022).

van Dishoeck, E. F. & R. C. Kennicutt: Introduction. *Annual Review of Astronomy and Astrophysics* 60, 1, V-VII. (2022).

van Gelder M., J. Jaspers, P. Nazari, A. Ahmadi, E. F. van Dishoeck, M. Beltrán, G. Fuller, Á. Sánchez-Monge, P. Schilke: Methanol deuteration in high-mass protostars. *Astron. Astrophys.* 667, A136 (2022).

van Gelder M., P. Nazari, B. Tabone, A. Ahmadi, E. F. van Dishoeck, M. Beltrán, G. Fuller, N. Sakai, Á. Sánchez-Monge, P. Schilke, Y. Yang, Y. Zhang: Importance of source structure on complex organics emission. I. Observations of CH_3OH from low-mass to high-mass protostars. *Astron. Astrophys.* 662, A67 (2022).

van Mierlo S., K. Caputi, M. Ashby, H. Atek, M. Bolzonella, R. Bowler, G. Brammer, C. Conselice, J. Cuby, P. Dayal, A. Díaz-Sánchez, S. Finkelstein, H. Hoekstra, A. Humphrey, O. Ilbert, H. McCracken, B. Milvang-Jensen, P. Oesch, R. Pello, G. Rodighiero, M. Schirmer, S. Toft, J. Weaver, S. Wilkins, C. Willott, G. Zamorani, A. Amara, N. Auricchio, M. Baldi, R. Bender, C. Bodendorf, D. Bonino, E. Branchini, M. Brescia, J. Brinchmann, S. Camera, V. Capobianco, C. Carbone, J. Carretero, M. Castellano, S. Cavuoti, A. Cimatti, R. Cledassou, G. Congedo, L. Conversi, Y. Copin, L. Corcione, F. Courbin, A. Da Silva, H. Degaudenzi, M. Douspis, F. Dubath, X. Dupac, S. Dusini, S. Farrens, S. Ferriol, M. Frailis, E. Franceschi, P. Franzetti, M. Fumana, S. Galeotta, B. Garilli, W. Gillard, B. Gillis, C. Giocoli, A. Grazian, F. Grupp, S. Haugan, W. Holmes, F. Hormuth, A. Hornstrup, K. Jahnke, M. Kümmel, A. Kiessling, M. Kilbinger, T. Kitching, R. Kohley, M. Kunz, H. Kurki-Suonio, R. Laureijs, S. Ligorì, P. Lilje, I. Lloro, E. Maiorano, O. Mansutti, O. Marggraf, K. Markovic, F. Marulli, R. Massey, S. Maurogordato, E. Medinaceli, M. Meneghetti, E. Merlin, G. Meylan, M. Moresco, L. Moscardini, E. Munari, S. Niemi, C. Padilla, S. Paltani, F. Pasian, K. Pedersen, V. Pettorino, S. Pires, M. Poncet, L. Popa, L. Pozzetti, F. Raison, A. Renzi, J. Rhodes, G. Riccio, E. Romelli, E. Rossetti, R. Saglia, D. Sapone, B. Sartoris, P. Schneider, A. Secroun, C. Sirignano, G. Sirri, L. Stanco, J. Starck, C. Surace, P. Tallada-Crespí, A. Taylor, I. Tereno, R. Toledo-Moreo, F. Torradeflot, I. Tutusaus, E. Valentijn, L. Valenziano, T. Vassallo, Y. Wang, A. Zacchei, J. Zoubian, S. Andreon, S. Bardelli, A. Boucaud, J. Graciá-Carpio, D. Maino, N. Mauri, S. Mei, F. Sureau, E. Zucca, H. Aussel, C. Baccigalupi, A. Balaguera-Antolínez, A. Biviano, A. Blanchard, S. Borgani, E. Bozzo, C. Burigana, R. Cabanac, F. Calura, A. Cappi, C. Carvalho, S. Casas, G. Castignani, C. Colodro-Conde, A. Cooray, J. Coupon, H. Courtois, M. Crocce, O. Cucciati, S. Davini, H. Dole, J. Escartin, S. Escoffier, M. Fabricius, M.

- Farina, K. Ganga, J. García-Bellido, K. George, F. Giacomini, G. Gozaliasl, S. Gwyn, I. Hook, M. Huertas-Company, V. Kansal, A. Kashlinsky, E. Keihanen, C. Kirkpatrick, V. Lindholm, R. Maoli, M. Martinelli, N. Martinet, M. Maturi, R. Metcalf, P. Monaco, G. Morgante, A. Nucita, L. Patrizii, A. Peel, J. Pollack, V. Popa, C. Porciani, D. Potter, P. Reimberg, A. Sánchez, V. Scottez, E. Sefusatti, J. Stadel, R. Teyssier, J. Valiviita, M. Viel: Euclid preparation. XXI. Intermediate-redshift contaminants in the search for $z > 6$ galaxies within the Euclid Deep Survey. *Astron. Astrophys.* 666, A200 (2022).
- van Terwisga S., A. Hacar, E. F. van Dishoeck, R. Oonk, S. Portegies Zwart: Survey of Orion Disks with ALMA (SODA). I. Cloud-level demographics of 873 protoplanetary disks. *Astron. Astrophys.* 661, A53 (2022).
- van't Hoff M.L., D. Harsono, M.L. van Gelder, T. Hsieh, J.J. Tobin, S.S. Jensen, N. Hirano, J.K. Jørgensen, E.A. Bergin, E.F. van Dishoeck: Imaging the Water Snowline around Protostars with Water and HCO⁺ Isotopologues. *Ap. J.* 924, 1 (2022).
- Varga T., D. Gruen, S. Seitz, N. MacCrann, E. Sheldon, W. Hartley, A. Amon, A. Choi, A. Palmese, Y. Zhang, M. Becker, J. McCullough, E. Rozo, E. Rykoff, C. To, S. Grandis, G. Bernstein, S. Dodelson, K. Eckert, S. Everett, R. Gruendl, I. Harrison, K. Herner, R. Rollins, I. Sevilla-Noarbe, M. Troxel, B. Yanny, J. Zuntz, H. Diehl, M. Jarvis, M. Aguena, S. Allam, J. Annis, E. Bertin, S. Bhargava, D. Brooks, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, M. Costanzi, L. da Costa, M. Pereira, J. De Vicente, S. Desai, J. Dietrich, I. Ferrero, B. Flaugher, J. García-Bellido, E. Gaztanaga, D. Gerdes, J. Gschwend, G. Gutierrez, S. Hinton, K. Honscheid, T. Jeltema, K. Kuehn, N. Kuropatkin, M. Maia, M. March, P. Melchior, F. Menanteau, R. Miquel, R. Morgan, J. Myles, F. Paz-Chinchón, A. Plazas, A. Romer, E. Sanchez, V. Scarpine, M. Schubnell, S. Serrano, M. Smith, M. Soares-Santos, E. Suchyta, M. Swanson, G. Tarle, D. Thomas, J. Weller, J. Weller, DES Collaboration: Synthetic galaxy clusters and observations based on Dark Energy Survey Year 3 Data. *Mon. Not. R. Astron. Soc.* 509, 4, 4865-4885 (2022).
- Vasilopoulos G., G. Jaisawal, C. Maitra, F. Haberl, P. Maggi, A. Karaferias: X-ray view of the 2021 outburst of SXP 15.6: Constraints on the binary orbit and magnetic field of the neutron star. *Astron. Astrophys.* 664, A194 (2022).
- Vastel C., F. Alves, C. Ceccarelli, M. Bouvier, I. Jiménez-Serra, T. Sakai, P. Caselli, L. Evans, F. Fontani, R. Le Gal, C. Chandler, B. Svoboda, L. Maud, C. Codella, N. Sakai, A. López-Sepulcre, G. Moellenbrock, Y. Aikawa, N. Balucani, E. Bianchi, G. Busquet, E. Caux, S. Charnley, N. Cuello, M. De Simone, F. Dulieu, A. Durán, D. Fedele, S. Feng, L. Francis, T. Hama, T. Hanawa, E. Herbst, T. Hirota, M. Imai, A. Isella, D. Johnstone, B. Lefloch, L. Loinard, M. Maureira, N. Murillo, S. Mercimek, S. Mori, F. Menard, A. Miotello, R. Nakatani, H. Nomura, Y. Oba, S. Ohashi, Y. Okoda, J. Ospina-Zamudio, Y. Oya, J. Pineda, L. Podio, A. Rimola, D. Segura Cox, Y. Shirley, L. Testi, S. Viti, N. Watanabe, Y. Watanabe, A. Witzel, C. Xue, Y. Zhang, B. Zhao, S. Yamamoto: FAUST. V. Hot methanol in the [BHB2007] 11 protobinary system; hot corino versus shock origin. *Astron. Astrophys.* 664, A171 (2022).
- Veilleux S., D.S. Rupke, W. Liu, A. To, M. Trippe, T.M. Tripp, F. Hamann, R. Genzel, D. Lutz, R. Maiolino, H. Netzer, K.R. Sembach, E. Sturm, L. Tacconi, S.H. Teng: Galactic Winds across the Gas-rich Merger Sequence. I. Highly Ionized N V and O VI Outflows in the QUEST Quasars. *Ap. J.* 926, 1 (2022).
- Velović V., M. Filipović, L. Barnes, R. Norris, C. Tremblay, G. Heald, L. Rudnick, S. Shabala, T. Pannuti, H. Anderson, O. Titov, S. Waddell, B. Koribalski, D. Grupe, T. Jarrett, R. Alsaberi, E. Carretti, J. Collier, S. Einecke, T. Galvin, A. Hotan, P. Manojlović, J. Marvil, K. Nandra, T. Reiprich, G. Rowell, M. Salvato, M. Whiting: Collimation of the kiloparsec-scale radio jets in NGC 2663. *Mon. Not. R. Astron. Soc.* 516, 2, 1865-1880 (2022).
- Veronica A., Y. Su, V. Biffi, T.H. Reiprich, F. Pacaud, P.E. Nulsen, R.P. Kraft, J.S. Sanders, A. Bogdan, M. Kara, K. Dolag, J. Kerp, B.S. Koribalski, T. Erben, E. Bulbul, E. Gatzuz, V. Ghirardini, A.M. Hopkins, A. Liu, K. Migkas, T. Vernstrom: The eROSITA view of the Abell 3391/95 field: The Northern Clump. The largest infalling structure in the longest known gas filament observed with eROSITA, XMM-Newton, and Chandra. *Astron. Astrophys.* 661, A46 (2022).
- Veropalumbo A., A. Binetti, E. Branchini, M. Moresco, P. Monaco, A. Oddo, A. Sánchez, E. Sefusatti: The halo 3-point correlation function: a methodological analysis. *J. of Cosmology and Astroparticle Phys.* 9 (2022).
- Vincenzi, M., M. Sullivan, A. Möller, [...], T.N. Varga, J. Weller, & R. Wilkinson: The Dark Energy Survey supernova program: cosmological biases from supernova photometric classification. *Mon. Not. R. Astron. Soc.* 518, 1, 1106-1127 (2022).
- Vollmer B., R. Davies, P. Gratier, T. Lizée, M. Imanishi, J. Gallimore, C. Impellizzeri, S. García-Burillo, F. Le Petit: From the Circumnuclear Disk in the Galactic Center to thick, obscuring tori of AGNs. Modeling the molecular emission of a parsec-scale torus as found in NGC 1068. *Astron. Astrophys.* 665, A102 (2022).
- von Fellenberg S.D., S. Gillessen, J. Stadler, M. Bauböck, R. Genzel, T. de Zeeuw, O. Pfuhl, P. Amaro Seoane, A. Drescher, F. Eisenhauer, M. Habibi, T. Ott, F. Widmann, A. Young: The Young Stars in the Galactic Center. *Ap. J. Lett.* 932, 1 (2022).
- Vulic N., A. Hornschemeier, F. Haberl, A. Basu-Zych, E. Kyritsis, A. Zezas, M. Salvato, A. Ptak, A. Bogdan, K. Kovlakas, J. Wilms, M. Sasaki, T. Liu, A. Merloni, T. Dwelly, H. Brunner, G. Lamer, C. Maitra, K. Nandra, A. Santangelo: The eROSITA Final Equatorial-Depth Survey (eFEDS). Presenting the demographics of X-ray emission from normal galaxies. *Astron. Astrophys.* 661, A16 (2022).
- Walker, S. A., M.S. Mirakhor, J. ZuHone, J.S. Sanders, A.C. Fabian, & P. Diwanji: Is there an enormous cold front at the virial radius of the Perseus cluster? *Ap. J.* 929, 1 (2022).
- Walmsley M., A.M. Scaife, C. Lintott, M. Lochner, V. Etebeth, T. Géron, H. Dickinson, L. Fortson, S. Kruk, K.L.

- Masters, K.B. Mantha, B.D. Simmons: Practical galaxy morphology tools from deep supervised representation learning. *Mon. Not. R. Astron. Soc.* 513, 2, 1581-1599 (2022).
- Wang L., Z. Zheng, C. Hao, R. Guo, R. Li, L. Qian, L. Xie, Y. Shi, H. Zou, Y. Cao, Y. Chen, X. Xia: H I content of massive red spiral galaxies observed by FAST. *Mon. Not. R. Astron. Soc.* 516, 2 (2022).
- Wang T., B. Magnelli, E. Schinnerer, D. Liu, Z.A. Modak, E.F. Jiménez-Andrade, C. Karoumpis, V. Kokorev, F. Bertoldi: A³COSMOS: A census on the molecular gas mass and extent of main-sequence galaxies across cosmic time. *Astron. Astrophys.* 660, A142 (2022).
- Wang Y., J. Kaastra, M. Mehdipour, J. Mao, E. Costantini, G.A. Kriss, C. Pinto, G. Ponti, E. Behar, S. Bianchi, G. Branduardi-Raymont, B. De Marco, S. Grafton-Waters, P. Petrucci, J. Ebrero, D.J. Walton, S. Kaspi, Y. Xue, S. Paltani, L. di Gesu, Z. He: Transient obscuration event captured in NGC 3227. II. Warm absorbers and obscuration events in archival XMM-Newton and NuSTAR observations. *Astron. Astrophys.* 657, A77 (2022).
- Weaver J., O. Kauffmann, O. Ilbert, H. McCracken, A. Moneti, S. Toft, G. Brammer, M. Shuntov, I. Davidzon, B. Hsieh, C. Laigle, A. Anastasiou, C. Jespersen, J. Vinther, P. Capak, C. Casey, C. McPartland, B. Milvang-Jensen, B. Mobasher, D. Sanders, L. Zalesky, S. Arnouts, H. Aussel, J. Dunlop, A. Faisst, M. Franx, L. Furtak, J. Fynbo, K. Gould, T. Greve, S. Gwyn, J. Kartaltepe, D. Kashino, A. Koekemoer, V. Kokorev, O. Le Fèvre, S. Lilly, D. Masters, G. Magdis, V. Mehta, Y. Peng, D. Riechers, M. Salvato, M. Sawicki, C. Scarlata, N. Scoville, R. Shirley, J. Silverman, A. Sneppen, V. Smolčić, C. Steinhardt, D. Stern, M. Tanaka, Y. Taniguchi, H. Teplitz, M. Vaccari, W. Wang, G. Zamorani: COSMOS2020: A Panchromatic View of the Universe to z 10 from Two Complementary Catalogs. *Ap. J. Supp. Ser.* 258, 1 (2022).
- Weber M.L., B. Ecolano, G. Picogna, C. Rab: The interplay between forming planets and photoevaporating discs I: forbidden line diagnostics. *Mon. Not. R. Astron. Soc.* 517, 3, 3598-3612 (2022).
- Weldon A., N.A. Reddy, M.W. Topping, A.E. Shapley, R.L. Sanders, X. Du, S.H. Price, M. Kriek, A.L. Coil, B. Siana, B. Mobasher, T. Fetherolf, I. Shivaiei, S. Rezaee: The MOSDEF-LRIS survey: connection between galactic-scale outflows and the properties of z 2 star-forming galaxies. *Mon. Not. R. Astron. Soc.* 515, 1, 841-856 (2022).
- Wetzell V., T. Jeltema, B. Hegland, S. Everett, P. Giles, R. Wilkinson, A. Farahi, M. Costanzi, D. Hollowood, E. Upsdell, A. Saro, J. Myles, A. Bermeo, S. Bhargava, C. Collins, D. Cross, O. Eiger, G. Gardner, M. Hilton, J. Jobel, P. Kelly, D. Laubner, A. Liddle, R. Mann, V. Martinez, J. Mayers, A. McDaniel, A. Romer, P. Rooney, M. Sahlen, J. Stott, A. Swart, D. Turner, P. Viana, T. Abbott, M. Agüena, S. Allam, F. Andrade-Oliveira, J. Annis, J. Asorey, E. Bertin, D. Burke, J. Calcino, A. Carnero Rosell, D. Carollo, M. Carrasco Kind, J. Carretero, A. Choi, M. Crocce, L. da Costa, M. Pereira, T. Davis, J. De Vicente, S. Desai, H. Diehl, J. Dietrich, P. Doel, A. Evrard, I. Ferrero, P. Fosalba, J. Frieman, J. García-Bellido, E. Gaztanaga, K. Glazebrook, D. Gruen, R. Gruendl, J. Gschwend, G. Gutierrez, S. Hinton, K. Honscheid, D. James, K. Kuehn, N. Kuropatkin, O. Lahav, G. Lewis, C. Lidman, M. Lima, M. Maia, J. Marshall, P. Melchior, F. Menanteau, R. Miquel, R. Morgan, A. Palmese, F. Paz-Chinchón, A. Plazas Malagón, E. Sanchez, V. Scarpine, S. Serrano, I. Sevilla-Noarbe, M. Smith, M. Soares-Santos, E. Suchyta, G. Tarle, D. Thomas, B. Tucker, D. Tucker, T. Varga, J. Weller, DES Collaboration: Velocity dispersions of clusters in the Dark Energy Survey Y3 redMaPPer catalogue. *Mon. Not. R. Astron. Soc.* 514, 4, 4696-4717 (2022).
- Wevers T., D. Pasham, P. Jalan, S. Rakshit, R. Arcodia: Host galaxy properties of quasi-periodically erupting X-ray sources. *Astron. Astrophys.* 659, L2 (2022).
- Whelan B., A. Veronica, F. Pacaud, T. Reiprich, E. Bulbul, M.E. Ramos-Ceja, J. Sanders, J. Aschersleben, J. Iljenkarevic, K. Migkas, M. Freyberg, K. Dennerl, M. Kara, A. Liu, V. Ghirardini, N. Ota: X-ray studies of the Abell 3158 galaxy cluster with eROSITA. *Astron. Astrophys.* 663, A171 (2022).
- Wielgus M., D. Lančová, O. Straub, W. Kluźniak, R. Narayan, D. Abarca, A. Róžańska, F. Vincent, G. Török, M. Abramowicz: Observational properties of puffy discs: radiative GRMHD spectra of mildly sub-Eddington accretion. *Mon. Not. R. Astron. Soc.* 514, 1, 780-789 (2022).
- Williams T.G., J. Sun, A.T. Barnes, E. Schinnerer, J.D. Henshaw, S.E. Meidt, M. Querejeta, E.J. Watkins, F. Bigiel, G.A. Blanc, M. Boquien, Y. Cao, M. Chevance, O.V. Egorov, E. Emsellem, S.C. Glover, K. Grasha, H. Hassani, S. Jeffreson, M.J. Jiménez-Donaire, J. Kim, R.S. Klessen, K. Kreckel, J.D. Kruijssen, K.L. Larson, A.K. Leroy, D. Liu, I. Pessa, J. Pety, F. Pinna, E. Rosolowsky, K.M. Sandstrom, R. Smith, M.C. Sormani, S. Stuber, D.A. Thilker, B.C. Whitmore: PHANGS-JWST First Results: Spurring on Star Formation: JWST Reveals Localized Star Formation in a Spiral Arm Spur of NGC 628. *Ap. J. Lett.* 941, 2, L27 (2022).
- Williams T.G., K. Kreckel, F. Belfiore, B. Groves, K. Sandstrom, F. Santoro, G.A. Blanc, F. Bigiel, M. Boquien, M. Chevance, E. Congiu, E. Emsellem, S.C. Glover, K. Grasha, R.S. Klessen, E. Koch, J.D. Kruijssen, A.K. Leroy, D. Liu, S. Meidt, H. Pan, M. Querejeta, E. Rosolowsky, T. Saito, P. Sánchez-Blázquez, E. Schinnerer, A. Schrubba, E.J. Watkins: The 2D metallicity distribution and mixing scales of nearby galaxies. *Mon. Not. R. Astron. Soc.* 509, 1 (2022).
- Wiseman P., M. Vincenzi, M. Sullivan, L. Kelsey, B. Popovic, B. Rose, D. Brout, T. Davis, C. Frohmaier, L. Galbany, C. Lidman, A. Möller, D. Scolnic, M. Smith, M. Agüena, S. Allam, F. Andrade-Oliveira, J. Annis, E. Bertin, S. Bocquet, D. Brooks, D. Burke, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, F. Castander, M. Costanzi, M. Pereira, S. Desai, H. Diehl, P. Doel, S. Everett, I. Ferrero, D. Friedel, J. Frieman, J. García-Bellido, M. Gatti, E. Gaztanaga, D. Gruen, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, D. James, M. March, F. Menanteau, R. Miquel, R. Morgan, A. Palmese, F. Paz-Chinchón, A. Pieres, A. Plazas Malagón, A. Romer, E. Sanchez, V. Scarpine, I. Sevilla-Noarbe, M. Soares-Santos, E. Suchyta, G.

- Tarle, C. To, T. Varga, DES Collaboration: A galaxy-driven model of type Ia supernova luminosity variations. *Mon. Not. R. Astron. Soc.* 515, 3, 4587-4605 (2022).
- Woitke P., A. Arabhavi, I. Kamp, W.-F. Thi: Mixing and diffusion in protoplanetary disc chemistry. *Astron. Astrophys.* 668, A164 (2022).
- Wong Y.H.V., P. Wang, T. Hashimoto, T. Takagi, T. Goto, S.J. Kim, C.K. Wu, A.Y. On, D.J.D. Santos, T. Lu, E. Kilerci-Eser, S.C. Ho, T.Y. Hsiao: ALMA Detections of [O III] and [C II] Emission Lines From A1689-zD1 at $z = 7.13$. *Ap. J.* 929, 2 (2022).
- Wootten A., R.O. Bentley, J. Baldwin, F. Combes, A. Fabian, G. Ferland, E. Loh, P. Salome, C. Shingledecker, A. Castro-Carrizo: Dense Molecular Clouds in the Crab Supernova Remnant. *Ap. J.* 925, 1 (2022).
- Wu H., M. Costanzi, C. To, A.N. Salcedo, D.H. Weinberg, J. Annis, S. Bocquet, M.E. da Silva Pereira, J. DeRose, J. Esteves, A. Farahi, S. Grandis, E. Roza, E.S. Rykoff, T.N. Varga, R.H. Wechsler, C. Zeng, Y. Zhang, Z. Zhang, DES Collaboration: Optical selection bias and projection effects in stacked galaxy cluster weak lensing. *Mon. Not. R. Astron. Soc.* 515, 3, 4471-4486 (2022).
- Wylezalek D., A. Vayner, D.S. Rupke, N.L. Zakamska, S. Veilleux, Y. Ishikawa, C. Bertemes, W. Liu, J.K. Barrera-Ballesteros, H. Chen, A.D. Goulding, J.E. Greene, K.N. Hainline, F. Hamann, T. Heckman, S.D. Johnson, D. Lutz, N. Lützgendorf, V. Mainieri, R. Maiolino, N.P. Nesvadba, P. Ogle, E. Sturm: First Results from the JWST Early Release Science Program Q3D: Turbulent Times in the Life of a $z \approx 3$ Extremely Red Quasar Revealed by NIRSpect IFU. *Ap. J. Lett.* 940, 1, L7 (2022).
- Wylie S.M., J.P. Clarke, O.E. Gerhard: The Milky Way's middle-aged inner ring. *Astron. Astrophys.* 659, A80 (2022).
- Xu W., M.E. Ramos-Ceja, F. Pacaud, T.H. Reiprich, T. Erben: Catalog of X-ray-selected extended galaxy clusters from the ROSAT All-Sky Survey (RXGCC). *Astron. Astrophys.* 658, A59 (2022).
- Yang L., X. Shu, F. Zhang, Y. Chandola, D. Liu, Y. Liu, M. Gu, M. Giustini, N. Jiang, Y. Li, D. Li, D. Elbaz, S. Juneau, M. Pannella, L. Sun, N. Tang, T. Wang, H. Zhou: Compact and Variable Radio Emission from an Active Galaxy with Supersoft X-Ray Emission. *Ap. J.* 935, 2 (2022).
- Yang Y., J.D. Green, K.M. Pontoppidan, J.B. Bergner, L.I. Cleeves, Evans, Neal J., II, R.T. Garrod, M. Jin, C.H. Kim, J. Kim, J. Lee, N. Sakai, C.N. Shingledecker, B. Shope, J.J. Tobin, E.F. van Dishoeck: CORINOS. I. JWST/MIRI Spectroscopy and Imaging of a Class 0 Protostar IRAS 15398-3359. *Ap. J. Lett.* 941, 1 (2022).
- Zacharegkas G., C. Chang, J. Prat, S. Pandey, I. Ferrero, J. Blazek, B. Jain, M. Crocce, J. DeRose, A. Palmese, S. Seitz, E. Sheldon, W. Hartley, R. Wechsler, S. Dodelson, P. Fosalba, E. Krause, Y. Park, C. Sánchez, A. Alarcon, A. Amon, K. Bechtol, M. Becker, G. Bernstein, A. Campos, A. Carnero Rosell, M. Carrasco Kind, R. Cawthon, R. Chen, A. Choi, J. Cordero, C. Davis, H. Diehl, C. Doux, A. Drlica-Wagner, K. Eckert, J. Elvin-Poole, S. Everett, A. Ferté, M. Gatti, G. Giannini, D. Gruen, R. Gruendl, I. Harrison, K. Herner, E. Huff, M. Jarvis, N. Kuropatkin, P. Leget, N. MacCrann, J. McCullough, J. Myles, A. Navarro-Alsina, A. Porredon, M. Raveri, R. Rollins, A. Roodman, A. Ross, E. Rykoff, L. Secco, I. Sevilla-Noarbe, T. Shin, M. Troxel, I. Tutusaus, T. Varga, B. Yanny, B. Yin, Y. Zhang, J. Zuntz, T. Abbott, M. Aguena, S. Allam, F. Andrade-Oliveira, J. Annis, D. Bacon, E. Bertin, D. Brooks, D. Burke, J. Carretero, F. Castander, M. Costanzi, L. da Costa, M. Pereira, S. Desai, J. Dietrich, P. Doel, A. Evrard, B. Flaugher, J. Frieman, J. García-Bellido, E. Gaztanaga, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, B. Hoyle, D. James, K. Kuehn, M. Lima, M. Maia, J. Marshall, P. Melchior, F. Menanteau, R. Miquel, J. Muir, R. Ogando, F. Paz-Chinchón, A. Pieres, E. Sanchez, S. Serrano, M. Smith, E. Suchyta, G. Tarle, D. Thomas, C. To, R. Wilkinson, DES Collaboration: Dark Energy Survey Year 3 results: galaxy-halo connection from galaxy-galaxy lensing. *Mon. Not. R. Astron. Soc.* 509, 3 (2022).
- Zamponi J., A. Giannetti, S. Bovino, G. Sabatini, D.R. Schleicher, B. Körtgen, S. Reissl, S. Wolf: Synthetic observations using POLARIS: an application to simulations of massive prestellar cores. *Astrophys. Space Sci.* 367, 6 (2022).
- Zelty G., B. Trakhtenbrot, M. Eracleous, J. Runnoe, J.R. Trump, J. Stern, Y. Shen, L. Hernández-García, F.E. Bauer, Q. Yang, T. Dwelly, C. Ricci, P. Green, S.F. Anderson, R.J. Assef, M. Guolo, C. MacLeod, M.C. Davis, L. Fries, S. Gezari, N.A. Grogin, D. Homan, A.M. Koekemoer, M. Krumpe, S. LaMassa, X. Liu, A. Merloni, M.L. Martínez-Aldama, D.P. Schneider, M.J. Temple, J.R. Brownstein, H. Ibarra-Medel, J. Burke, C. Pellegrino, J.A. Kollmeier: A Transient "Changing-look" Active Galactic Nucleus Resolved on Month Timescales from First-year Sloan Digital Sky Survey V Data. *Ap. J. Lett.* 939, 1, L16 (2022).
- Zhang C., Z. Ling, X. Sun, S. Sun, Y. Liu, Z. Li, Y. Xue, Y. Chen, Y. Dai, Z. Jia, H. Liu, X. Zhang, Y. Zhang, S. Zhang, F. Chen, Z. Cheng, W. Fu, Y. Han, H. Li, J. Li, Y. Li, P. Liu, X. Ma, Y. Tang, C. Wang, R. Xie, A. Yan, Q. Zhang, B. Jiang, G. Jin, L. Li, X. Qiu, D. Su, J. Sun, Z. Xu, S. Zhang, Z. Zhang, N. Zhang, X. Bi, Z. Cai, J. He, H. Liu, X. Zhu, H. Cheng, C. Cui, D. Fan, H. Hu, M. Huang, C. Jin, D. Li, H. Pan, W. Wang, Y. Xu, X. Yang, B. Zhang, M. Zhang, W. Zhang, D. Zhao, M. Bai, Z. Ji, Y. Liu, F. Ma, J. Su, J. Tong, Y. Wang, Z. Zhao, C. Feldman, P. O'Brien, J. Osborne, R. Willingale, V. Burwitz, G. Hartner, A. Langmeier, T. G. Müller, S. Rukdee, T. Schmidt, E. Kuulkers, W. Yuan: First Wide Field-of-view X-Ray Observations by a Lobster-eye Focusing Telescope in Orbit. *Ap. J. Lett.* 941, 1, L2 (2022).
- Zhao Y., Y.A. Li, J. Shangquan, M. Zhuang, L.C. Ho: The Relation between Morphological Asymmetry and Nuclear Activity in Low-redshift Galaxies. *Ap. J.* 925, 1 (2022).
- Zhou C., C. Vastel, J. Montillaud, C. Ceccarelli, K. Demyk, J. Harju, M. Juvela, I. Ristorcelli, T. Liu: Chemical exploration of Galactic cold cores. *Astron. Astrophys.* 658, A131 (2022).
- Zhu L., G. van de Ven, R. Leaman, A. Pillepich, L. Coccato,

- Y. Ding, J. Falcón-Barroso, E. Iodice, I.M. Navarro, F. Pinna, E.M. Corsini, D.A. Gadotti, K. Fahrion, M. Lyubenova, S. Mao, R. McDermid, A. Poci, M. Sarzi, T. de Zeeuw: The Fornax3D project: Discovery of ancient massive merger events in the Fornax cluster galaxies NGC 1380 and NGC 1427. *Astron. Astrophys.* 664, A115 (2022).
- Zucker C., A.A. Goodman, J. Alves, S. Bialy, M. Foley, J.S. Speagle, J. Groschedl, D.P. Finkbeiner, A. Burkert, D. Khimey, C. Swiggum: Star formation near the Sun is driven by expansion of the Local Bubble. *Nature* 601, 334-337 (2022).
- Zuo P., L.C. Ho, J. Wang, N. Yu, J. Shangguan: Massive Galaxy Mergers Have Distinctive Global H I Profiles. *Ap. J.* 929, 1 (2022).
- Zürcher D., J. Fluri, R. Sgier, T. Kacprzak, M. Gatti, C. Doux, L. Whiteway, A. Réfrégier, C. Chang, N. Jeffrey, B. Jain, P. Lemos, D. Bacon, A. Alarcon, A. Amon, K. Bechtol, M. Becker, G. Bernstein, A. Campos, R. Chen, A. Choi, C. Davis, J. Derose, S. Dodelson, F. Elsner, J. Elvin-Poole, S. Everett, A. Ferte, D. Gruen, I. Harrison, D. Huterer, M. Jarvis, P. Leget, N. Maccrann, J. McCullough, J. Muir, J. Myles, A. Navarro Alsina, S. Pandey, J. Prat, M. Raveri, R. Rollins, A. Roodman, C. Sanchez, L. Secco, E. Sheldon, T. Shin, M. Troxel, I. Tutusaus, B. Yin, M. Agüena, S. Alam, F. Andrade-Oliveira, J. Annis, E. Bertin, D. Brooks, D. Burke, A. Carnero Rosell, M. Carrasco Kind, J. Carretero, F. Castander, R. Cawthon, C. Conselice, M. Costanzi, L. da Costa, M. da Silva Pereira, T. Davis, J. De Vicente, S. Desai, H. Diehl, J. Dietrich, P. Doel, K. Eckert, A. Evrard, I. Ferrero, B. Flaugher, P. Fosalba, D. Friedel, J. Frieman, J. Garcia-Bellido, E. Gaztanaga, D. Gerdes, T. Giannantonio, R. Gruendl, J. Gschwend, G. Gutierrez, S. Hinton, D. Hollowood, K. Honscheid, B. Hoyle, D. James, K. Kuehn, N. Kuropatkin, O. Lahav, C. Lidman, M. Lima, M. Maia, J. Marshall, P. Melchior, F. Menanteau, R. Miquel, R. Morgan, A. Palmese, F. Paz-Chinchon, A. Pieres, A. Plazas Malagón, K. Reil, M. Rodriguez Monroy, K. Romer, E. Sanchez, V. Scarpine, M. Schubnell, S. Serrano, I. Sevilla, M. Smith, E. Suchyta, G. Tarle, D. Thomas, C. To, T. Varga, J. Weller, R. Wilkinson, DES Collaboration: Dark energy survey year 3 results: Cosmology with peaks using an emulator approach. *Mon. Not. R. Astron. Soc.* 511, 2, 2075-2104 (2022).

Instrumentelle Publikationen

Adams D., R. Content, J. Lawrence, H. McGregor, A. Horton, M. Ireland, L. Spitler, R. Zhelem, J. Greiner, S. Klose, U. Laux, M. Trenti: Skyhopper CubeSat: a multi-band NIR telescope for precise intensity measurements. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12180 (2022).

Asquini, L., M. Landoni, D. Young, [...] F. Biondi et al.: Dynamic scheduling for SOXS instrument: environment, algorithms and development. In J. Ibsen, & G. Chiozzi (Eds.), *Software and Cyberinfrastructure for Astronomy VII* (2022).

Basso S., B. Salmaso, M. Ghigo, D. Spiga, G. Vecchi, G. Sironi, V. Cotroneo, P. Conconi, E. Redaelli, A. Bianco, G. Pareschi, G. Tagliaferri, D. Sisana, C. Pellicciari, M. Fiorini, S. Incorvaia, M. Uslenghi, L. Paoletti, C. Ferrari, S. Beretta, A. Zappettini, M.S. del Rio, G. Parodi, V. Burwitz, S. Rukdee, G. Hartner, T. Müller, T. Schmidt, A. Langmeier, D. Ferreira, S. Massahi, N. Gellert, F. Christensen, M. Bavdaz, I. Ferreira: The expanded, parallel, and monochromatic x-ray beam of BEaTriX: alignment and characterization. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12181 (2022).

Battaini F., K. Radhakrishnan, R. Claudi, M. Munari, R. Sánchez, M. Aliverti, M. Colapietro, D. Ricci, L. Lessio, M. Dima, F. Biondi, S. Campana, P. Schipani, A. Baruffolo, S. Ben-Ami, G. Capasso, R. Cosentino, F. D'Alessio, P. D'Avanzo, O. Hershko, H. Kuncarayakti, M. Landoni, G. Pignata, A. Rubin, S. Scuderi, F. Vitali, D. Young, J. Achrén, J. Araiza-Durán, I. Arcavi, A. Brucalassi, R. Bruch, E. Cappellaro, M. Della Valle, M. De Pascale, R. Di Benedetto, S. D'Orsi, A. Gal-Yam, M. Genoni, M. Hernandez, J. Kotilainen, G. Li Causi, L. Marty, S. Mattila, M. Rappaport, M. Riva, B. Salasnich, S. Smartt, M. Stritzinger, H. Ventura: The internal alignment and validation of a powered ADC for SOXS. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12184 (2022).

Bavdaz M., E. Wille, M. Ayre, I. Ferreira, B. Shortt, S. Fransen, M. Millinger, M.J. Collon, G. Vacanti, N.M. Barrière, B. Landgraf, M. Olde Riekerink, J. Haneveld, R. Start, C. van Baren, D. Della Monica Ferreira, S. Massahi, S. Svendsen, F. Christensen, M. Krumrey, E. Handick, V. Burwitz, G. Pareschi, B. Salmaso, A. Moretti, D. Spiga, G. Valsecchi, D. Vernani, P. Lupton, W. Mundon, G. Phillips, J. Schneider, T. Korhonen, A. Sanchez, D. Heinis, C. Colldelram, M. Tordi, S. De Lorenzi, R. Willingale: ATHENA optics technology development. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12181 (2022).

Bergomi M., L. Marafatto, E. Carolo, D. Greggio, D. Ricci, D. Vassallo, L. Lessio, K. Radhakrishnan Santhakumari, G. Umbriaco, M. Dima, S. Di Filippo, V. D'Orazi, D. Mesa, M. Montoya, L. Mohr, V. Viotto, A. Baruffolo, F. Biondi, S. Chavan, S. Chinellato, M. De Pascale, K. Don, P. Grenz,

F. Laudisio, J. Leisenrin, R. Ragazzoni, F. Pedichini, R. Piazzesi, E. Pinna, A. Puglisi, A. Bianco, A. Carlotti, C. Knapic, M. Vicinanza, A. Zanutta, J. Christou, A. Conrad, L. Funk, C. Veillet, J. Farinato: SHARK-NIR: from design to installation, ready to dive into first light. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12187 (2022).

Biglioli A., B. Courtney-Barrer, R. Abuter, F. Eisenhauer, F. Gonte, R. Laugier, G. Raskin, M. Riquelme, M. Salzman, N. Schuhler, J. Woillez, D. Defrère: Measuring and compensating vibrations at the VLTI: MANHATTAN-II self-intrinsic noise and hardware extension. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12183 (2022).

Biondi F., M. Hartl, N. Geis, V. Hörmann, A. Emslander, K. Kravchenko, S. Rabien, L. Barl, J. Kinast, T. Peschel, A. Gebhardt, S. Müller, M. Rohde, C. Damm, D. Kampf, E. Sturm, R. Davies: Verification strategy for the MICA-DO cold optics. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12188 (2022).

Bonholzer M., R. Andritschke, V. Emberger, G. Hauser, J. Müller-Seidlitz: Drain current characteristics of Athena WFI flight-like DEPFETs. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12181 (2022).

Bougueroua S., M. Ångerman, J. Barnstedt, A. Colin, L. Conti, S. Diebold, R. Duffard, O. Janson, C. Kalkuhl, N. Kappelmann, T. Keilig, S. Klinkner, A. Krabbe, M. Lengowski, C. Lockowandt, P. Maier, T. Müller, A. Pahler, T. Rauch, T. Schanz, B. Stelzer, M. Taheran, A. Vaerneus, K. Werner, J. Wolf: Status, flight preparation, and future instrument opportunities of the STUDIO balloon-borne telescope platform. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12182 (2022).

Bourdarot G.: Heterodyne interferometry: review and prospects. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12183 (2022).

Bourdarot G., J. Berger, T. Allain, H. Guillet de Chatellus: A complete photonics correlation scheme for future mid-infrared heterodyne interferometry instrumentation. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12183 (2022).

Breuer J., G. Galgóczi, V. Fioretti, J. Zlámal, P. Liska, N. Werner, G. Santin, N. Boudin, I. Ferreira, M. Guainazzi, A. von Kienlin, S. Lotti, T. Mineo, S. Molendi, E. Perinati: Athena charged particle diverter simulations: effects of micro-roughness on proton scattering using Geant4. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12181 (2022).

Burwitz V., G. Vacanti, M.J. Collon, N. Barrière, M. Bavdaz, I. Ferreira, M. Ayre, E. Tipper, J. Eder, E. Breunig, G. Hartner, A. Langmeier, T. Müller, S. Rukdee, T. Schmidt: X-ray testing ATHENA optics at PANTER. Society of Photo-Optical Instrumentation Engineers (SPIE)

Conference Series 12181 (2022).

Carlotti A., A. Bidot, D. Mouillet, J. Correia, L. Jocou, S. Curaba, A. Delboulbé, E. Le Coarer, P. Rabou, G. Bourdarot, T. Forveille, X. Bonfils, G. Vasisht, D. Mawet, R.S. Burruss, R. Oppenheimer, R. Doyon, E. Artigau, P. Vallée: On-sky demonstration at Palomar Observatory of the near-IR, high-resolution VIPA spectrometer. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12184 (2022).

Clénet Y., T. Buey, E. Gendron, S. Karkar, F. Vidal, M. Cohen, F. Chapron, A. Sevin, S. Thijs, S. Taburet, B. Borgo, J. Huet, A. Blin, O. Dupuis, J. Gaudemard, F. Ferreira, J. Raffard, F. Chemla, V. Lapeyrère, V. Deo, A. Bertrou-Cantou, N. Galland, S. Guieu, E. Meyer, N. Gautherot, E. Tisserand, H. Locatelli, F. Meyer, A. Zidi, C. Kulcsár, H. Raynaud, B. Sassolas, L. Pinard, C. Michel, D. Gratadour, B. Le Ruyet, R. Dembet, M. Ortiz, C. Collin, V. Arslanyan, B. Doncic, L. Ghouchou, I. Ibn Taïeb, P. Baudoz, E. Huby, G. Rousset, S. Rabien, V. Hörmann, E. Sturm, R. Davies: The MICADO first light imager for the ELT: overview of the SCAO module at its final design. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12185 (2022).

Collon M.J., L. Abalo, N.M. Barrière, A. Bayerle, L. Castiglione, N. Eenkhoorn, D. Girou, R. Günther, E. Hauser, R. van der Hoeven, J. den Hollander, Y. Jenkins, B. Landgraf, L. Keek, B. Okma, P. da Silva Ribeiro, C. Rizzos, A. Thete, G. Vacanti, S. Verhoeckx, M. Vervest, R. Visser, L. Voruz, M. Bavdaz, E. Wille, I. Ferreira, M. Olde Riekerink, J. Haneveld, A. Koelewijn, M. Wijnperle, J. Lankwarden, B. Schurink, R. Start, C. van Baren, J. den Herder, E. Handick, M. Krumrey, V. Burwitz, S. Masahi, D.D.M. Ferreira, S. Svendsen, F.E. Christensen, W. Mundon, G. Phillips: The development of the mirror for the Athena x-ray mission. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12181 (2022).

Cosentino R., M. Hernandez, H. Ventura, S. Campana, R. Claudi, P. Schipani, M. Aliverti, A. Baruffolo, S. Ben-Ami, F. Biondi, G. Capasso, F. D'Alessio, P. D'Avanzo, O. Hershko, H. Kuncarayakti, M. Landoni, M. Munari, G. Pignata, A. Rubin, S. Scuderì, F. Vitali, D. Young, J. Achrén, J.A. Araiza-Durán, I. Arcavi, A. Brucalassi, R. Bruch, E. Cappellaro, M. Colapietro, M. Della Valle, M. De Pascale, R. Di Benedetto, S. D'Orsi, A. Gal-Yam, M. Genoni, J. Kotilainen, G. Li Causi, L. Marty, S. Mattila, M. Rappaport, K. Radhakrishnan, D. Ricci, M. Riva, B. Salasnich, A. Slemer, S. Smartt, R. Zanmar Sanchez, M. Stritzinger: Laboratory test of the VIS detector system of SOXS for the ESO-NTT Telescope. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12184 (2022).

Cottinelli, A, D. Vassallo, J. Farinato, D. Magrin, F. Biondi, P. Royer, R. Ragazzoni, I. Pagano, M. Pagliuzzi, A. Novi.: Hartmann data analysis for PLATO TOU EM. SPIE Astronomical Telescopes + Instrumentation. (Eds.) L. E. Coyle, S.Matsuura., M.D. Perrin. Proc. of SPIE, Vol. 12180, SPIE, (2022).

Courtney-Barrer B., J. Woillez, R. Laugier, A. Bigioli, N. Schuhler, P. Guajardo, V. Lizana, N. Behara, F. Eisenhauer, M. Ireland, X. Haubois, D. Defrère: Towards a better understanding of OPD limitations for higher sensitivity and contrast at the VLTI. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12183 (2022).

Coutinho D., M. E. Ramos-Ceja, K. Dennerl, F. Haberl, N. Meidinger, A. Merloni, P. Predehl, I. Stewart, M. Freyberg, W. Bornemann, H. Brunner, V. Burwitz, S. Czesla, J. Eder, S. Friedrich, R. Gaida, A. Gueguen, G. Hartner, W. Kink, I. Kreykenbohm, G. Lamer, C. Maitra, T. Mernik, S. Mueller, P. Nandra, E. Pfeffermann, J. Robrade: SRG/eROSITA status and operations during the first four all-sky surveys. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12181 (2022).

Drescher A., M. Fabricius, T. Shimizu, J. Woillez, P. Bourget, F. Widmann, J. Shangguan, C. Straubmeier, M. Horrobin, N. Schuhler, F. Eisenhauer, F. Gonté, S. Gillissen, T. Ott, G. Perrin, T. Paumard, W. Brandner, L. Kreidberg, K. Perraut, J. Le Bouquin, P. Garcia, S. Hönig, D. Defrère, G. Bourdarot, H. Feuchtgruber, R. Genzel, M. Hartl, F. Haussmann, D. Lutz, N. More, C. Rau, J. Sauter, S. Uysal, P. Wessely, E. Wieprecht, L. Wimmer, S. Yazici: GRAVITY+ Wide: towards hundreds of z 2 AGN. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12183 (2022).

Dupuis O., F. Chemla, M. Cohen, J. Huet, F. Chapron, E. Gendron, S. Karkar, T. Buey, Y. Clénet, R. Davies: The MICADO first light imager for the ELT: positioning strategy of the SCAO subsystems with FaroArm. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12188 (2022).

Emberger V., M. Bonholzer, J. Müller-Seidlitz, R. Andritschke: Total ionizing dose test with DEPFET sensors for Athena's WFI. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12181 (2022).

Farinato, J., A. Baruffolo, M. Bergomi, (...), F. Biondi: SHARK-NIR, ready to "swim" in the LBT Northern Hemisphere "ocean". SPIE Astronomical Telescopes + Instrumentation. (Eds.) L. Schreiber, D. Schmidt, E. Vernet. Proc. of SPIE, 12185, SPIE, (2022).

Finger G., F. Eisenhauer, T. Hardy, G. Burley, C. Mandla, J. Stegmeier: Initial characterization of the ME1120 ROIC for the 512x512 pixel large SAPHIRA infrared e-APD array. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12191 (2022).

Freyberg M.J., T. G. Müller, E. Perinati, H. Krüger, P. Strub, C. Tenzer, A. Merloni, N. Meidinger, P. Predehl, S. Friedrich, D. Coutinho, M. E. Ramos-Ceja, C. Maitra, K. Dennerl, C. Pommeranz: SRG/eROSITA micrometeoroid hits and effects. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12181 (2022).

Galgóczi G., J. Breuer, V. Fioretti, J. Zlámál, N. Werner, V. Čalkovský, N. Boudin, I. Ferreira, M. Guainazzi, A. von Kienlin, S. Lotti, T. Mineo, S. Molendi, E. Perinati: Geant4 simulation of the residual background in the ATHENA

wide field imager from protons deflected by the charged particle diverter. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12181 (2022).

Genoni M., A. Scaudo, G. Li Causi, L. Cabona, M. Landoni, S. Campana, P. Schipani, R. Claudi, M. Aliverti, A. Baruffolo, S. Ben-Ami, F. Biondi, G. Capasso, R. Cosentino, F. D'Alessio, P. D'Avanzo, O. Hershko, H. Kuncarayakti, M. Munari, G. Pignata, K. Radhakrishnan, A. Rubin, S. Scuderi, F. Vitali, D. Young, J. Achren, J. Araiza-Duran, I. Arcavi, F. Battaini, A. Brucalassi, R. Bruch, E. Cappellaro, M. Colapietro, M. Della Valle, M. De Pascale, R. Di Benedetto, S. D'Orsi, A. Gal-Yam, M. Hernandez, J. Kotilainen, L. Marty, S. Mattila, M. Rappaport, D. Ricci, M. Riva, B. Salasnich, S. Smartt, R. Zammar Sanchez, M. Stritzinger, H. Ventura: Progress on the simulation tools for the SOXS spectrograph: exposure time calculator and end-to-end simulator. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12187 (2022).

Grazian A., M. Simioni, C. Arcidiacono, J. Achren, Y. Clenet, Y. Cao, R. Davies, M. Gullieuszik, T. Helin, D. Jodlbauer, H. Kuncarayakti, M. Le Louarn, S. Mattila, F. Pedichini, R. Piazzesi, E. Portaluri, G. Verdoes Kleijn, B. Vulcani, R. Wagner, S. Williams, A. Zanella, W.W. Zeilinger: Status of the PSF reconstruction work package for MICADO at ELT. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12185 (2022).

Guainazzi M., R. Willingale, L. Brenneman, E. Bulbul, J. den Herder, E. Kuulkers, J. Ness, L. Natalucci: On the scientific impact of the uncertainties in the Athena mirror effective area. *Journal of Astronomical Telescopes, Instruments, and Systems* 8 (2022).

Heilmann R.K., A.R. Brucoleri, V. Burwitz, P. Cheimets, C. DeRoo, A. Garner, E.M. Gullikson, H.M. Günther, G. Hartner, E. Hertz, A. Langmeier, T. Mueller, S. Rukdee, T. Schmidt, R.K. Smith, M.L. Schattenburg: Flight-like critical-angle transmission grating x-ray performance for Arcus. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12181 (2022).

Herrmann M., R. Andritschke, M. Bonholzer, G. Hauser, M.S. Magelund, J. Müller-Seidlitz, J. Reiffers: Mitigation of bandwidth limitation induced crosstalk on Athena's WFI. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12181 (2022).

Kravchenko K., Y. Dallilar, O. Absil, A.A. Berbel, A. Baruffolo, M. Bonse, A. Buron, Y. Cao, A. Cortes, F. Danner, R. Davies, R.J. De Rosa, M. Deysenroth, D.S. Doelman, F. Eisenhauer, S. Esposito, H. Feuchtgruber, N. Förster Schreiber, X. Gao, H. Gemperlein, R. Genzel, S. Gillessen, C. Ginski, A. Glauser, A. Glindemann, P. Grani, P. Haguenaue, J. Hartwig, J. Hayoz, M. Heida, M. Kenworthy, J. Kolb, H. Kuntschner, D. Lutz, D. Liu, M. MacIntosh, M. Marsset, G. Orban de Xivry, H. Özdemir, A. Puglisi, S. Quanz, C. Rau, A. Riccardi, D. Schuppe, F. Snik, E. Sturm, L. Tacconi, W.D. Taylor, E. Wiezorrek: First on-sky results of ERIS at VLT. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12184 (2022).

Lang-Bardl F., A. Monna, F. Grupp, R. Bender, S. Anadevara, C. Goessl, H. Hess, R. Katterloher, H. Kravcar, H. Kravcar, F. Kummer, J. Schlichter, M. Wegner, V. Ziel: The MICADO main selection mechanism: final design. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12184 (2022).

Lapucci T., M. Bonaglia, L. Busoni, P. Grani, A. Puglisi, J. Ziegler, C. Eredia, E. Cascone, M. Colapietro, P. Ciliagi: MORFEO (formerly known as MAORY) LOR WFS module preliminary electronics design. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12185 (2022).

Le Duigou J., N. Boufracha, V. Burwitz, S. Clamagirand, C. Feldman, A. Gomes, F. Gonzalez, D. Götz, K. Mercier, A. Meuris, P. O'Brien, P. Pasquier, J. Pearson, N. Renault-Tinacci, L. Roucayrol, T. Tournette, R. Willingale: Stability and assembly precision of MXT line of sight. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12187 (2022).

Maciaszek T., A. Ealet, W. Gillard, K. Jahnke, R. Barbier, E. Prieto, W. Bon, A. Bonnefoi, A. Caillat, M. Carle, A. Costille, F. Ducret, C. Fabron, B. Foulon, J. Gimenez, E. Grassi, M. Jaquet, D. Le Mignant, L. Martin, T. Pampolona, P. Sanchez, J.-. Clémens, L. Caillat, M. Niclas, A. Secroun, B. Kubik, S. Ferriol, M. Berthe, J.-P. Barrière, J. Fontignie, L. Valenziano, N. Auricchio, P. Battaglia, A. De Rosa, R. Farinelli, E. Franceschi, E. Medinaceli, G. Morgante, F. Sortino, M. Trifoglio, L. Corcione, V. Capobianco, S. Lorigi, S. Dusini, E. Borsato, F. Dal Corso, F. Laudisio, C. Sirignano, L. Stanco, S. Ventura, L. Patrizii, T. Chiarusi, F. Fornari, F. Giacomini, A. Margiotta, N. Mauri, L. Pasqualini, G. Sirri, M. Spurio, M. Tenti, R. Travaglini, C. Bonoli, F. Bortoletto, A. Balestra, M. Dalesandro, F. Grupp, D. Penka, J. Steinwagner, F. Hormuth, M. Schirmer, G. Seidel, C. Padilla, R. Casas, Y. Lloro, R. Toledo-Moreo, J. Gomez, C. Colodro-Conde, D. Lizán, J.-. Diaz, P. Lilje, M. Andersen, J. Andersen, A. Sørensen, A. Hornstrup, N. Jessen, C. Thizy, W. Holmes, M. Pniel, M. Jhabvala, S. Pravdo, M. Seiffert, A. Waczynski, R. Laureij, G. Racca, J.-. Salvignol, T. Boenke, P. Strada, Y. Mellier: Euclid near infrared spectrometer and photometer instrument flight model presentation, performance, and ground calibration results summary. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12180 (2022).

Madsen K.K., W. Baumgartner, J. Kegley, E. Wright, E. Breunig, V. Burwitz, I. Ferreira, A. Ptak: Simulations of the ATHENA performance verification testing at XRCF. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12181 (2022).

Mercier K., F. Gonzalez, D. Götz, M. Boutelier, N. Boufracha, S. Clamagirand, A. Fort, A. Gomes, E. Guilhem, J. Le Duigou, S. Mazeau, J. Sanisidro, A. Meuris, C. Feldman, J. Pearson, R. Willingale, V. Burwitz, N. Meidinger, F. Robinet: Results of the development of the MXT x-ray telescope for the SVOM mission. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12181 (2022).

- Miller E.D., C.E. Grant, M.W. Bautz, S. Molendi, R. Kraft, P. Nulsen, E. Bulbul, S. Allen, D.N. Burrows, T. Eraerds, V. Fioretti, F. Gastaldello, D. Hall, M.W. Hubbard, J. Keelan, N. Meidinger, E. Perinati, A. Rau, D. Wilkins: Mitigating the effects of particle background on the Athena Wide Field Imager. *Journal of Astronomical Telescopes, Instruments, and Systems* 8 (2022).
- Millour F., P. B erio, S. Lagarde, S. Robbe-Dubois, C. Gouvret, O. Lai, F. Allouche, C. Baillet, O. Boebion, M. Carillet, A. Marcotto, A. Spang, P. Girard, N. Maucleurt, J. Lebouquin, T. Paumard, F. Soulez, J. Woillez, N. More, F. Eisenhauer, C. Straubmeier, L. Kreidberg, P. Garcia, S. Hoenig: Building a GRAVITY+ adaptive optics test bench. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12183 (2022).
- M uller-Seidnitz J., R. Andritschke, M. Bonholzer, V. Emberger, G. Hauser, M. Herrmann, P. Lechner, A. Mayr, J. Oser: Spectroscopic performance of flight-like DEP-FET sensors for Athena's WFI. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12181 (2022).
- Paw U. C.K., B. Walsh, K. Kuntz, R. Nutter, C. Connor, S. Busk, V. Burwitz, G. Hartner, T. M uller, S. Rukdee, T. Schmidt, E. Atz, N. Dobson, D. Chornay, F.S. Porter, K. Simms, V. Naldoza, S. Sembay, D.G. Sibeck, N. Thomas: X-ray micropore optic array preliminary calibration results for the lunar environment heliospheric x-ray imager. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12181 (2022).
- Pommranz C.M., C. Tenzer, S.J. Diebold, E. Perinati, M.J. Freyberg, A. Santangelo: Simulation studies of the eROSITA particle-induced background using a highly detailed mass model. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12181 (2022).
- Radhakrishnan Santhakumari K.K., F. Battaini, R. Claudi, A. Slemer, F. Biondi, M. Munari, R. Sanchez, M. Aliverti, L. Oggioni, M. Colapietro, D. Ricci, L. Lessio, M. Dima, L. Marafatto, S. Campana, P. Schipani, S. D'Orsi, B. Salasnich, A. Baruffolo, S. Ben-Ami, G. Capasso, R. Cosentino, F. D'Alessio, P. D'Avanzo, O. Hershko, H. Kuncarayakti, M. Landoni, G. Pignata, A. Rubin, S. Scuderi, F. Vitali, D. Young, J. Achr en, J.A. Araiza-Dur an, A. Brucalassi, R. Bruch, E. Cappellaro, R. Di Benedetto, A. Gal-Yam, M. Genoni, M. Hernandez, J. Kotilainen, G. Li Causi, S. Mattila, M. Rappaport, M. Riva, S. Smartt, M. Stritzinger, H. Venturae: From assembly to the complete integration and verification of the SOXS common path. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12184 (2022).
- Ramasawmy J., P.D. Klaassen, C. Cicone, T.K. Mroczkowski, C. Chen, T. Cornish, E. da Cunha, E. Hatziminaoglou, D. Johnstone, D. Liu, Y. Perrott, A. Schimek, T. Stanke, S. Wedemeyer: The Atacama Large Aperture Submillimetre Telescope: key science drivers. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12190 (2022).
- Reiffers J., S. Albrecht, O. H alker, A. Lederhuber, B. Mican, F.J. Veredas: Hardware development of Athena WFI frame processing module. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12181 (2022).
- Riccardi A., A. Puglisi, P. Grani, R. Briguglio, S. Esposito, G. Agapito, V. Biliotti, M. Bonaglia, L. Carbonaro, M. Xompero, A. Baruffolo, B. Salasnich, G. Di Rico, R. Davies, H. Feuchtgruber, C. Rau, Y. Dallilar, K. Kravchenko, J. Kolb, P. Haguenaer, C. Soenke, D. Barr, A. Cortes, J. Reyes: The ERIS Adaptive Optics System: first on-sky results of the ongoing commissioning at the VLT-UT4. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12185 (2022).
- Rodr guez L., A. Adami, A. Aliane, X. de la Bro ise, C. Delisle, A. Demonti, D. Desforge, S. Dubos, L. Dussopt, C. Gennet, V. Goudon, O. Gevin, H. Kaya, G. Lasfargues, J. Martignac, X.-A. Navick, A. Poglitsch, V. Reveret, M. Sauvage, T. Tollet, F. Visticot: Highly sensitive and wide dynamic range polarimetric detectors arrays in the submillimeter domain. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12190 (2022).
- Rukdee, S.: Trade-off study of a high-resolution spectrograph on a CubeSat to study exoplanets. *SPIE Optical Engineering + Applications, 2021. (Eds.) SPIE Proceeding, Society of Photo-Optical Instrumentation Engineers (SPIE), (2021).*
- Salmaso B., S. Basso, M. Ghigo, D. Spiga, G. Vecchi, G. Sironi, V. Cotroneo, P. Conconi, E. Redaelli, A. Bianco, G. Pareschi, G. Tagliaferri, D. Sisana, C. Pellicciari, M. Fiorini, S. Incorvaia, M. Uslenghi, L. Paoletti, C. Ferrari, R. Lolli, A. Zappettini, M. Sanchez del Rio, G. Parodi, V. Burwitz, S. Rukdee, G. Hartner, T. M uller, T. Schmidt, A. Langmeier, D. Ferreira, S. Massahi, N. Gellert, F. Christensen, M. Bavdaz, I. Ferreira, M. Collon, G. Vacanti, N. Barri re: X-ray tests of the ATHENA mirror modules in BEaTriX: from design to reality. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12181 (2022).
- Santhakumari, K. K. R., F. Battaini, R. Claudi, A. Slemer, F. Biondi et al.: From assembly to the complete integration and verification of the SOXS common path. In *Ground-Based and Airborne Instrumentation for Astronomy IX. USA: Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* (2022).
- Sevin A., F. Ferreira, E. Gendron, F. Vidal, D. Gratadour, Y. Cl enet, R. Davies: The MICADO first light imager for the ELT: final design and prototype of the MICADO SCAO RTC. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12185 (2022).
- Simioni M., C. Arcidiacono, R. Wagner, A. Grazian, M. Gullieuszik, E. Portaluri, B. Vulcani, A. Zanella, G. Agapito, R. Davies, T. Helin, F. Pedichini, R. Piazzesi, E. Pinna, R. Ramlau, F. Rossi, A. Salo: LBT SOUL data as a science test bench for MICADO PSF-R tool. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12185 (2022).
- Simioni M., C. Arcidiacono, R. Wagner, A. Grazian, M. Gullieuszik, E. Portaluri, B. Vulcani, A. Zanella, G.

Agapito, R. Davies, T. Helin, F. Pedichini, R. Piazzesi, E. Pinna, R. Ramlau, F. Rossi, A. Salo: Point spread function reconstruction for SOUL + LUCI LBT data. *Journal of Astronomical Telescopes, Instruments, and Systems* 8 (2022).

Smith R.K., M. Bautz, J. Bregman, L. Brenneman, N. Brickhouse, E. Bulbul, V. Burwitz, J. Bushman, C. Canizares, D. Chakrabarty, P. Cheimets, E. Costantini, C. DeRoo, A. Falcone, A. Foster, L. Gallo, C. Grant, H.M. Guenther, R.K. Heilmann, S. Heine, B. Hine, D. Huenemoerder, S. Jara, J. Kaastra, E. Kara, I. Kreykenbohm, K. Madsen, H. Marshall, M. McDonald, R. McEntaffer, J. Miller, E. Miller, R. Mushotzky, K. Nandra, M. Nowak, F. Paerels, R. Petre, K. Poppenhaeger, A. Ptak, P. Reid, K. Ronzano, A. Rozanska, J. Samra, J. Sanders, M. Schattenburg, J. Schonfeld, N. Schulz, A. Smale, P. Temi, L. Valencic, S. Walker, J. Wilms, S. Wolk: Arcus: exploring the formation and evolution of clusters, galaxies, and stars. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12181 (2022).

Tamura N., Y. Moritani, K. Yabe, Y. Ishizuka, Y. Kamata, A. Allaoui, A. Arai, S. Arnouts, R.H. Barkhouser, R. Barrette, P. Blanchard, E. Bergeron, N. Caplar, P. Chabaud, Y. Chang, H. Chen, C. Chou, Y. Chu, J.G. Cohen, R.L. da Costa, T. Crauchet, R.P. de Almeida, A.C. de Oliveira, L.S. de Oliveira, K. Dohlen, L.H. dos Santos, R.S. Ellis, M. Fabricius, D. Ferreira, H. Furusawa, J.J. Givans, J. Garcíá-Carpio, M. Golebiowski, A. Gray, J.E. Gunn, S. Hamano, R.P. Hammond, A. Harding, K. Hayashi, W. He, T.M. Heckman, S.C. Hope, S. Hsu, Y. Hu, P.J. Huang, M.N. Ishigaki, E. Jeschke, Y. Jing, E. Kado-Fong, J.L. Karr, S. Kawanomoto, M. Kimura, M. Koike, E. Komatsu, S. Koshida, V. Le Brun, A. Le Fur, D. Le Mignant, R. Lhoussaine, Y. Lin, H. Ling, C.P. Loomis, R.H. Lupton, F. Madec, D. Marchesini, E. Marguerite, L.S. Marrara, D. Medvedev, S. Mineo, S. Miyazaki, T. Morishima, K. Murata, H. Murayama, G.J. Murray, H. Okita, M. Onodera, J. Peebles, P. Price, T. Pyo, L. Ramos, D.J. Reiley, M. Reinecke, M. Roberts, J.A. Rosa, J.P. Rousselle, M. Sarkis, M.D. Seiffert, K. Schubert, H. Siddiqui, S.A. Smee, L. Sodr , M.A. Strauss, C. Surace, M. Taghizadeh Popp, P.J. Tait, M. Takada, Y. Takagi, M. Tanaka, Y. Tanaka, A.R. Thakar, D. Vibert, S. Wang, C. Wen, S. Werner, M. Wung, G. Lemson, A. Mitschang, N. Yasuda, H. Yoshida, C. Yan, M. Yoshida, T. Yamashita: Prime Focus Spectrograph (PFS) for the Subaru Telescope: its start of the last development phase. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12184 (2022).

Tollet T., S. Bounissou, A. Aliane, C. Delisle, L. Dusopt, V. Goudon, H. Kaya, G. Lasfargues, A. Poglitsch, V. Rev ret, L. Rodriguez: On-chip spectroscopic solutions for polarimetric bolometer arrays in submillimeter astronomy. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12190 (2022).

Veredas F.J., S. Albrecht, D. Coutinho, A. Lederhuber, J. Reiffers: Time distribution on the Athena WFI. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12181 (2022).

Vernani D., G. Bianucci, G. Grisoni, F. Marioni, G. Valsecchi, A. Keereman, Y. Chen, M. Cong, Y. Yang, J. Wang, V. Burwitz, J. Eder, P. Friedrich, G. Hartner, A. Langmeier, T. Mueller, S. Rukdee, T. Schmidt: Follow-up x-ray telescope (FXT) mirror module for the Einstein probe mission. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12181 (2022).

Vidal F., N. Galland, A. Bertrou-Cantou, E. Gendron, V. Deo, A. Zidi, F. Ferreira, A. Sevin, C. Kulcs r, H. Raynaud, Y. Cl net, R. Davies: The MICADO first light imager for the ELT: FDR numerical simulations for the SCAO mode. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12185 (2022).

Wang S., M. Kimura, C. Yan, Y. Chang, S. Hsu, J. Karr, H. Chen, P. Huang, C. Wen, R.C. Chou, H. Ling, N. Tamura, Y. Moritani, J. Rousselle, H. Yoshida, S. Koshida, N. Takato, D.J. Reiley, M. Roberts, J.E. Gunn, C. Loomis, R.H. Lupton, N. Caplar, H. Siddiqui, D. Ferreira, L. Henrique dos Santos, L.S. Oliveira, A. Cesar de Oliveira, L.S. Marrara, M. Fabricius, G.J. Murray: Prime focus spectrograph (PFS) for the Subaru Telescope: the prime focus instrument. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12184 (2022).

Widmann F., S. Gillessen, T. Ott, T. Shimizu, F. Eisenhauer, M. Fabricius, J. Woillez, F. Gont , M. Horrobin, J. Shangguan, S. Yazici, G. Perrin, T. Paumard, W. Brandner, L. Kreidberg, C. Straubmeier, K. Perraut, J. Le Bouquin, P. Garcia, S. H nig, D. Defr re, G. Bourdarot, A. Drescher, H. Feuchtgruber, R. Genzel, M. Hartl, D. Lutz, N. More, C. Rau, S. Uysal, E. Wieprecht: GRAVITY faint: reducing noise sources in GRAVITY+ with a fast metrology attenuation system. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12183 (2022).

Zhang S., A. Santangelo, Y. Xu, M. Feroci, M. Hernanz, F. Lu, Y. Chen, H. Feng, K. Nandra, W. Jiang, J. Svoboda, S. Brandt, S. Schanne, J. in't Zand, M. Michalska, E. Bozzo, E. Kalemci, I. Agudo, M. Ahangarianabhari, G. Aitink-Kroes, Z. An, J. Cao, X. Cao, T. Chen, C. Chen, Y. Chen, Y. Cheng, M. Cong, W. Cui, T. Cui, Z. Wu, Y. Liu, Y. Su, J. Wang, Z. Zhang, G. Jin, L. Li, X. Qiu, Y. Lin, T. Li, J. Zhang, C. Wu, W. Xu, Z. Hu, Z. Xu, F. Qiao, K. Pan, S. Zhang, L. Song, H. He, F. Zhang, H. Liu, X. Liu, Y. Yang, Z. Song, J. Zhang, K. Yu, Y. Wang, W. Li, D. Han, J. Wang, Z. Zhang, H. Wang, D. Zhang, M. Gao, J. Ma, J. Huo, M. Li, D. Hou, X. Yang, Z. Zhao, X. Zhao, J. Xu, L. Luo, Y. Zhu, H. Zhang, X. Liu, Y. Gu, Y. Du, S. Yang, L. Sun, J. Jiang, J. Yang, Z. Dong, B. Dai, Y. Jiao, X. Wen, B. Meng, A. Zhang, R. Wang, T. Zhang, B. Lu, N. Gao, X. Xu, T. Luo, L. Qi, G. Li, J. Qu, S. Xiong, L. Tao, S. Jia, M. Ge, S. Zheng, X. Li, X. Ma, Y. Huang, C. Li, J. Nie, H. Zhao, J. Guan, J. Liao, H. Zhang, J. Zhang, P. Wang, X. Zhao, L. Wang, L. Zhang, S. Yi, B. Li, Y. Tan, F. Qi, W. Wang, G. Ou, H. Hu, J. Shi, Q. Hu, X. Jiang, H. Li, Y. Hu, B. Jiang, C. Tenzer, E. Perinati, S. Pliego: Enhanced X-ray Timing and Polarimetry mission: eXTP: an update on its scientific cases, mission profile and development status. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series* 12181 (2022).

- Zidi A., H. Raynaud, C. Kulcsár, F. Vidal, E. Gendron, Y. Clénet, R. Davies: The MICADO first light imager for the ELT: SCAO LQG control performance with windshake, vibrations, and mirror dynamics. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12185 (2022).
- de Jong R.S., O. Bellido-Tirado, J.G. Brynneel, A. Ezzati Amini, S. Frey, C. Fülllein, M. Gäbler, D. Giannone, D. Johl, S. Kuba, U. Lemke, G. Micheva, A. Saviuk, M. Steinmetz, J.C. Walcher, R. Winkler, K. Lind, J. Loveday, S. Feltzing, R. McMahon, V. Mainieri, J. Pirard, T. Bensby, M. Bergemann, C. Chiappini, N. Christlieb, M.L. Cioni, J. Comparat, S. Driver, I. Hook, M. Irwin, J. Kneib, J. Liske, A. Merloni, I. Minchev, J. Richard, E. Starkenburg, M. Sullivan, C. Worley, W. Gaessler, F. Laurent, J. Pragt, A. Remillieux, F. Rothmaier, S. Smedley, I. Stiliz, N. Walton, D.M. Alexander, R. Church, S. Croom, L.J. Davies, C. Heneka, N. Kacharov, J. Knoche, G. Kordopatis, M. Krumpke, S. Martell, P. Norberg, I. Pelisoli, S. Sharma, J. Storm, E. Tempel: 4MOST: the 4-metre multi-object spectroscopic telescope project in the assembly, integration, and test phase. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12184 (2022).
- van den Born J., R. Romp, A. Janssen, R. Navarro, W. Jellema, E. Tolstoy, B. Jayawardhana, M. Hartl: The MICADO atmospheric dispersion corrector: optomechanical design, expected performance and calibration techniques. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series 12184 (2022).

Nicht-referierte Publikationen

- Alberton, D.: High-resolution rotational spectroscopy of APN, a promising amino- acid precursor. The 26th International Conference on High Resolution Molecular Spectroscopy. (Eds.) D. Alberton, V. Lattanzi, C. Endres, P. Caselli. 26th International Conference on High Resolution Molecular Spectroscopy proceedings (2022).
- Araki, M., T. Ito, S. Hoshino, K. Tsukiyama: Rotationally resolved gas-phase spectrum of the $A2\Sigma^+ - X2\Pi3/2$ electronic transition for the cyanogen halide radical cation ICN^+ . *Journal of Molecular Spectroscopy*, 388, 111675 (2022).
- Arcodia R.: X-ray blasts from awakening massive black holes. Hypatia Colloquium Early Career Astronomer Series at ESO 2022, (Eds.): G. Beccari and H.M.J. Boffin, Proceedings of Hypatia Colloquium 2022 (2022).
- Bahar Y.E., E. Bulbul, N. Clerc, V. Ghirardini, A. Liu, K. Nandra, F. Pacaud, I. Chiu, J. Comparat, J. Ider-Chitham, M. Klein, T. Liu, A. Merloni, K. Migkas, N. Okabe, M.E. Ramos Ceja, T. Reiprich, J. Sanders, T. Schrabback: Scaling Relations and X-ray Observables of Galaxy Clusters and Groups Detected in the eFEDS Field. *AAS/High Energy Astrophysics Division* 54, 3 (2022).
- Beechert J., T. Siebert, J. Tomsick, A. Zoglauer, S. Boggs, T. Brandt, H. Gulick, P. Jean, C. Kierans, H. Lazar, A. Lowell, J. Roberts, C. Sleator, P. von Ballmoos: Measurement of emission lines by the Compton Spectrometer and Imager. *AAS/High Energy Astrophysics Division* 54, 3 (2022).
- Bisbas T.G., E. van Dishoeck, C. Hu, A. Schruba: PDF_{CHEM}: Fast simulations of the chemical ISM using probability distributions. *European Physical Journal Web of Conferences* 265 (2022).
- Bosman A.D., L. Trapman, A. Sturm, E.A. Bergin, A.S. Booth, J.K. Calahan, E.F. van Dishoeck, M.K. McClure, A. Miotello, K. Zhang: Hydrostatic Equilibrium Does Not Solve the $C^{18}O$ Flux Problem in Protoplanetary Disks. *Research Notes of the American Astronomical Society* 6, 9 (2022).
- Brusa, M., G. Matzeu, S. Bianchi, E. Piconcelli, M. Dadina, G. Lanzuisi, A. Bongiorno, M. Cappi, A. Comastri, D. Costanzo, G. Cresci, F. Duras, C. Feruglio, R. Gilli, F. La Franca, A. Luminari, G. Matt, R. Middei, E. Nardini, G. Ponti, F. Tombesi, E. Torresi, C. Vignali, A. Zaino, & L. Zappacosta: Supermassive Black Hole Winds in X-rays. *Memorie della Societa Astronomica Italiana*, 93, 48-55 (2022).
- Buchner J.: An Intuition for Physicists: Information Gain From Experiments. *Research Notes of the American Astronomical Society* 6, 5 (2022).
- Bulbul E., Erosita Clusters, Cosmology Working Group: Tracing Baryons in Clusters of Galaxies with eROSITA. *AAS/High Energy Astrophysics Division* 54, 3 (2022).
- Colzi L., F. Fontani, V.M. Rivilla, P. Caselli: Nitrogen isotopes in the interstellar medium: A chemical journey across the Galaxy. *European Physical Journal Web of Conferences* 265 (2022).
- De Pra M., N. Pinilla-Alonso, A.C. Souza Feliciano, C. Schambeau, B. Harvison, J. Emery, D. Cruikshank, Y. Pendleton, B. Holler, J. Stansberry, V. Lorenzi, T. Muller, A. Guilbert-Lepoutre, N. Peixinho, M. Bannister, R. Brunetto: Discovering the Surface Composition of TNOs (DiSCO-TNOs) with the James Webb Space Telescope. *EPSC Abstracts Vol. 16, EPSC2022-1060*, 2022, European Planetary Science Congress (2022).
- Diehl R.: Gamma-ray observations of cosmic nuclei. *European Physical Journal Web of Conferences* 260 (2022).
- Döhring T., V. Stieglitz, R. Hudec, I. Sapsai, P. Friedrich, V. Burwitz: Characterization of a lobster-eye type X-ray telescope. *European Physical Journal Web of Conferences* 266 (2022).
- Fleischhack H., J.M. Burgess, N. Di Lalla, N. Omodei: The Multi-Mission Maximum Likelihood Framework threeML: Multi-wavelength Astronomy in Practice. *Astronomical Society of the Pacific Conference Series* 532 (2022).
- García Martín P., S. Kruk, M. Popescu, B. Merín, M. Mahlke, B. Carry, R. Thomson, S. Karadag, E. Racero, F. Giordano, D. Baines, J. Durán, G. de Marchi, R. Laureijs, K.R. Stapelfeldt, R.W. Evans: Hubble Asteroid Hunter: Identifying asteroid trails in Hubble Space Telescope images. *EPSC Abstracts Vol. 16, EPSC2022-1060*, 2022, European Planetary Science Congress (2022).
- GRAVITY Collaboration, Sturm, E., Y. Cao, Y. Clenet, R. Davies, J. Dexter, A. Eckart, F. Eisenhauer, R. Genzel, D. Gratadour, S. Hönig, M. Kishimoto, S. Lacour, D. Lutz, F. Millour, H. Netzer, G. Perrin, B. Peterson, P.-O. Petrucci, O. Pfuhl, M. A. Prieto, D. Rouan, D. Santos, J. Shangguan, T. Shimizu, M. R. Stock, I. Waisberg, J. Woillez, P.T. de Zeeuw, A. Amorim, W. Brandner, P. J. V. Garcia, S. Gillessen, N. M. Förster Schreiber, T. Ott, T. Paumard, K. Perraut, C. Straubmeier, L. J. Tacconi, A. Sternberg, K. R. W. Tristram: The Core of the Matter - Spatially Resolving Active Galactic Nuclei with GRAVITY. *The Messenger* 188, 20-25 (2022).
- Gravity+ Collaboration, R. Abuter, P. Alarcon, F. Allouche, A. Amorim, C. Bailet, H. Bedigan, A. Berdeu, J.-. Berger, P. Berio, A. Bigioli, R. Blaho, O. Boebion, M.-. Bolzer, H. Bonnet, G. Bourdarot, P. Bourget, W. Brandner, C. Cardenas, R. Conzelmann, M. Comin, Y. Clénet, B. Courtney-Barrer, Y. Dallilar, R. Davies, D. Defrère, A. Delboulbé, F. Delplancke-Ströbele, R. Dembet, T. de Zeeuw, A. Drescher, A. Eckart, C. Édouard, F. Eisenhauer, M. Fabricius, H. Feuchtgruber, G. Finger, N. Förster Schreiber, E. Fuenteseca, E. Garcia, P. Garcia, F. Gao, E. Gendron, R. Genzel, J. Gil, S. Gillessen, T. Gomes, F. Gonté, C. Gouvret, P. Guajardo, I. Guidolin, S. Guieu, R. Guzmán, W. Hackenberg, N. Haddad, M. Hartl, X. Haubois, F. Haußmann, G. Heißel, T. Henning, S. Hippler, S. Hönig, M. Horrobin, N. Hubin, E. Jacqmart, L. Jocou, A. Kaufer, P. Kervella, J.-. Kirchbauer, J. Kolb, H.

- Korhonen, L. Kreidberg, P. Krempf, S. Lacour, S. Lagarde, O. Lai, V. Lapeyrère, R. Laugier, J.-. Le Bouquin, J. Leftley, P. Léna, S. Lewis, D. Lutz, Y. Magnard, F. Mang, A. Marcotto, D. Maurel, A. Mérand, F. Millour, N. More, H. Nowacki, M. Nowak, S. Oberti, F. Olivares, T. Ott, L. Pallanca, T. Paumard, K. Perraut, G. Perrin, R. Petrov, O. Pfuhl, N. Pourré, S. Rabien, C. Rau, M. Riquelme, S. Robbe-Dubois, S. Ro-chat, M. Salman, M. Scherbarth, M. Schöller, J. Schubert, N. Schuhler, J. Shangguan, P. Shchekaturov, T. Shimizu, S. Scheithauer, A. Sevin, C. Soenke, F. Soulez, A. Spang, E. Stadler, C. Straubmeier, E. Sturm, C. Sykes, L. Tacconi, H. Tischer, K. Tristram, F. Vincent, S. von Fellenberg, S. Uysal, F. Widmann, E. Wieprecht, E. Wieszorrek, J. Woillez, Ş. Yazıcı, G. Zins: The GRAVITY+ Project: Towards All-sky, Faint-Science, High-Contrast Near-Infrared Interferometry at the VLTI. *The Messenger* 189, 17-22 (2022).
- Green P., L. Pulgarin-Duque, S. Anderson, C. MacLeod, M. Eracleous, J. Ruan, B. Roulston, D. Schneider, A. Ahlf, D. Bizyaev, J. Brownstein, S.J. del Casal, S. Dodd, D. Hoover, C. Matt, A. Merloni, K. Pan, A. Ramirez, M. Ridder: Quasars Toggling in Real-time: Changing-Look Quasars from Multi-Epoch Spectroscopy in The Time Domain Spectroscopic Survey of SDSS-IV. *American Astronomical Society Meeting Abstracts* 54 (2022).
- Gulick H., J.C. Martinez Oliveros, J. Tomsick, A. Lowell, B. Mochizuki, A. Zoglauer, T. Takahashi, K. Nakazawa, H. Yoneda, S. Boggs, T. Siegert: Detector System for Time-Domain Astrophysics in the Soft Gamma-ray Regime. *AAS/High Energy Astrophysics Division* 54, 3 (2022).
- Haerendel G.: Mating of two current circuits - A new type of plasma instability. *EGU General Assembly Conference Heilmann R., A. Bruccoleri, V. Burwitz, E. Gullikson, E. Hertz, M. Schattenburg, R. Smith: Soft x-ray diffraction efficiency and record resolving power of critical-angle transmission gratings for Arcus. AAS/High Energy Astrophysics Division* 54, 3 (2022).
- Karwin C., S. Boggs, J. Tomsick, A. Zoglauer, H. Lazar, J. Beechert, H. Gulick, C. Kierans, C. Sleator, P. Jean, J. Roberts, T. Siegert: The COSI Data Challenges and Simulations. *AAS/High Energy Astrophysics Division* 54, 3 (2022).
- Kravchenko K.: Tomography of evolved star atmospheres. *Hypatia Colloquium Early Career Astronomer Series at ESO 2022*, (Eds.): G. Beccari and H.M.J. Boffin, *Proceedings of Hypatia Colloquium 2022* (2022).
- Kümmel M., T. Vassallo, C. Dabin, J. Gracia Carpio: Tiling the Euclid Sky. *Astronomical Society of the Pacific Conference Series* 532 (2022).
- Landoni, M., L. Marty, D. Young, [...], F. Biondi et al.: The quality check system architecture for Son-Of-X-Shooter SOXS. In J. Ibsen, & G. Chiozzi (Eds.), *Software and Cyberinfrastructure for Astronomy VII* (2022).
- Lazar H., A. Lowell, J. Tomsick, C. Sleator, A. Zoglauer, J. Beechert, S. Boggs, H. Gulick, D. Hartmann, C. Karwin, C. Kierans, J. Roberts, A. Shih, T. Siegert: Soft gamma-ray polarimetry with COSI. *AAS/High Energy Astrophysics Division* 54, 3 (2022).
- Merloni A.: eROSITA on SRG. *AAS/High Energy Astrophysics Division* 54, 3 (2022).
- Montargès M., E. Cannon, E. Lagadec, A. de Koter, P. Kervella, J. Sanchez-Bermudez, C. Paladini, F. Cantalloube, L. Decin, P. Scicluna, K. Kravchenko, A. Dupree, S. Ridgway, M. Wittkowski, N. Anugu, R. Norris, G. Rau, G. Perrin, A. Chiavassa, S. Kraus, J. Monnier, F. Millour, J.-. Le Bouquin, X. Haubois, B. Lopez, P. Stee, W. Danchi: The Great Dimming of Betelgeuse from the VLT/VLTI. (Eds.): L. Decin, A. Zijlstra, C. Gielen, *IAU Symposium, Proceedings of the IAU Symposium* 366 (2022).
- Mori, H., & P. Friedrich: Collimators for x-ray astronomical optics. In A. Santangelo, & C. Bambi (Eds.), *Handbook of X-ray and Gamma-ray Astrophysics*. Singapore: Springer Singapore (2022).
- Nandra K., eROSITA AGN Working Group: First results on Active Galactic Nuclei from eROSITA. *AAS/High Energy Astrophysics Division* 54, 3 (2022).
- Ogasawara K., B. Klecker, H. Kucharek, M. Dayeh, R. Ebert: The pickup He⁺ velocity distributions embedded in a CME structure. *EGU General Assembly Conference Abstracts* (2022).
- Orlando E., V. Petrosian, A. Strong: The Quiet Sun: Synchrotron Emission from Galactic Cosmic Rays as a New Component. *AAS/High Energy Astrophysics Division* 54, 3 (2022).
- O'Rourke L., T. G. Müller, N. Biver, D. Bockelee-Morvan, S. Hasegawa, I. Valtchanov, M. Kueppers, S. Fornasier, H. Campins, H. Fujiwara, D. Teyssier, T. Lim: The 3.1 μm NIR feature is not due to surface/subsurface water ice on asteroids. *AAS/Division for Planetary Sciences Meeting Abstracts* 54 (2022).
- Pineda J.E., D. Segura-Cox, P. Caselli, N. Cunningham, B. Zhao, A. Schmiedeke, M.J. Maureira, R. Neri: Feeding a Protostar with 10 000 au Scale Streamers. *European Physical Journal Web of Conferences* 265 (2022).
- Roberts J., Y. Sheng, T. Siegert, J. Beechert, S. Boggs, T. Brandt, C. Karwin, H. Gulick, C. Kierans, H. Lazar, C. Sleator, J. Tomsick, A. Zoglauer: Analysis Pipeline Tools and Discrete Source Imaging Capabilities for the Compton Spectrometer and Imager Small Explorer (COSI-SMEX) Telescope. *AAS/High Energy Astrophysics Division* 54, 3 (2022).
- Sarkar A., S. Randall, Y. Su, G. Alvarez, W. Forman, P. Nulsen, E. Blanton, E. Bulbul, C. Sarazin, J. ZuHone, F. Andrade-Santos, R. Johnson: Discovery of a pre-merger shock in an intercluster filament in Abell 98. *American Astronomical Society Meeting Abstracts* 54 (2022).
- Seibert C.V., M.J. Burgdorf, S.A. Bühler, T.G. Müller: The Moon as a Tool for the Calibration of HIRS. *EGU General Assembly Conference Abstracts* 22-7192 (2022).
- Shreeram S., E. Bulbul, V. Ghirardini, A. Liu, Y.E. Bahar, K. Nandra, J. Sanders, M. Brüggem, A. Merloni: Tracing baryons in the cosmic web filaments with eROSITA. *AAS/High Energy Astrophysics Division* 54, 3 (2022).

Stieglitz V., V. Burwitz, T. Doehring, R. Hudec, S. Vitek: Design and testing of a Kirkpatrick-Baez optics variator. *European Physical Journal Web of Conferences* 266 (2022).

Szakáts R., C. Kiss, A. Pál, T. Müller, J. Greiner, P. Santos-Sanz, G. Marton, J.L. Ortiz, N. Morales, R. Duffard, P. Sághi: On the rotation of the dwarf planet (136199) Eris. *EPSC Abstracts Vol. 16, EPSC2022-1060, 2022, European Planetary Science Congress (2022)*.

Szakáts R., C. Kiss, T. Müller, I. Valtchanov: Herschel/SPIRE photometry of targeted and serendipitously observed asteroids. *EPSC Abstracts Vol. 16, EPSC2022-1060, 2022, European Planetary Science Congress (2022)*.

Tamassia, F., L. Bizzocchi, M. Melosso, M.-A. Martin-Drumel, O. Pirali, A.P. Charmet, E. Canè, L. Dore, I.E. Gordon, J.-C. Guillemin, B. M. Giuliano, P. Caselli, S. Alessandrini, V. Barone, & C. Pizzarini: Synchrotron-based far-infrared spectroscopy of HC3N: Extended ro-vibrational analysis and new line list up to 3360 cm⁻¹. *Journal of Quantitative Spectroscopy and Radiative Transfer* 279, 108044 (2022).

Tomsick J., S. Boggs, A. Zoglauer, E. Wulf, B. Philips, C. Sleator, T. Brandt, A. Shih, M. Amman, J. Roberts, P. Jean, P. von Ballmoos, J.C. Martinez Oliveros, A. Smale, C. Kierans, D. Hartmann, M. Leising, M. Ajello, E. Burns, C. Fryer, P. Saint-Hilaire, J. Malzac, F. Tavecchio, V. Fioretti, A. Bulgarelli, G. Ghirlanda, H. Chang, T. Takahashi, K. Nakazawa, S. Matsumoto, T. Melia, T. Siebert, H. Lazar,

H. Gulick, J. Beechert, C. Karwin, F. Shirazi, Y. Sheng, H. Yoneda, C. Chu: The Compton Spectrometer and Imager (in MeV session). *AAS/High Energy Astrophysics Division* 54, 3 (2022).

Tozzi, P., E. Rasia, L. Bassini, S. Borgani, C. Feruglio, R. Gilli, A. Liu, G. Murante, L. Pentericci, P. Rosati, A. Saro, & A. Saxena: Mapping feedback processes in the intracluster medium at low and high redshift. *Memorie della Societa Astronomica Italiana*, 93, 114-121 (2022).

Vercellone, S., C. Bigongiari, A. Burtovoi, [...], G. Ponti et al.: ASTRI Mini-Array core science at the Observatorio del Teide. *Journal of High Energy Astrophysics*, 35, 1-42 (2022).

Vincent J., S. Kruk, E. Schallig, M. Kueppers, S. Besse, C. Mignone, M. Bentley, D. Heather, S. Birch, B. Merin: Rosetta Zoo: finding changes on comet 67P. *EPSC Abstracts Vol. 16, EPSC2022-1060, 2022, European Planetary Science Congress (2022)*.

von Fellenberg S.: Young Stars in the Galactic Center. *Hypatia Colloquium Early Career Astronomer Series at ESO 2022*, (Eds.): G. Beccari and H.M.J. Boffin, *Proceedings of Hypatia Colloquium 2022* (2022).

Wenzel, G., A. Simon, S. Banhatti, P. Jusko, S. Schlemmer, S. Brünken, & C. Joblin: Infrared spectroscopy of the benzylium-like (and tropylium-like) isomers formed in the -H dissociative ionization of methylated PAHs. *Journal of Molecular Spectroscopy* 385 (2022).

Bücher / Beiträge in Büchern

Arnaboldi, M., O. Gerhard: In Book: *Reviews in Extragalactic Astronomy*. (Eds.) Contini, E., *Frontiers in Astrophysics and Space Science*, p.2283-2306 (2022).

den Herder, J. W., M. Feroci, & N. Meidinger: X-ray detectors for astrophysics. In Book: *Handbook of X-ray and Gamma-ray Astrophysics*. (Eds.) C. Bambi, A. Santangelo, Springer Nature Singapore, Singapore (2022).

Diehl, R.: Radioactive decay. In Book: *Handbook of X-ray and Gamma-ray Astrophysics*. (Eds.) C. Bambi, A. Santangelo, Springer Nature Singapore, Singapore (2022).

Dennerl, K.: Comets, Mars and Venus. In Book: *Handbook of X-ray and Gamma-ray Astrophysics*. (Eds.) C. Bambi, A. Santangelo, Springer Nature Singapore, Singapore (2022).

Haerendel, G.: *My Life in Space Exploration*. Springer Internat. Publishing, Springer Biographies, Cham, Switzerland, p1-223 (2022).

Genzel, R.: Foreword. In Book: *Astrophysics, Astronomy and Space Sciences in the History of the Max Planck Society* (pp. IX-XI). Leiden, Netherlands: Brill Publishers (2022).

Kierans, C., T. Takahashi, & G. Kanbach: Compton telescopes for gamma-ray astrophysics. In Book: *Handbook of X-ray and Gamma-ray Astrophysics*. (Eds.) C. Bambi, A. Santangelo, Springer Nature Singapore, Singapore (2022).

Meidinger, N., J. Müller-Seidlitz: DEPFET active pixel sensors. In Book: *Handbook of X-ray and Gamma-ray Astrophysics*. (Eds.) C. Bambi, A. Santangelo, Springer Nature Singapore, Singapore (2022).

Sasaki, M., G. Ponti, & A.J. Mackey: Diffuse hot plasma in the interstellar medium and galactic outflows. In Book: *Handbook of X-ray and Gamma-ray Astrophysics*. (Eds.) C. Bambi, A. Santangelo, Springer Nature Singapore, Singapore (2022).

Siebert, T., D. Horan, & G. Kanbach: Telescope concepts in gamma-ray astronomy. In Book: *Handbook of X-ray and Gamma-ray Astrophysics*. (Eds.) C. Bambi, A. Santangelo, Springer Nature Singapore, Singapore (2022).

van Dishoeck, E. F.: *The Sky Is for Everyone. Women Astronomers in Their Own Words*. (Eds.) V. Trimble & D. A. Weintraub. Princeton University Press, p.244 (2022).

Artikel in der Öffentlichkeitsarbeit

Gillessen, S.: Gedanken jenseits der Physik. Rezension des Buches "Der Flug der Stare" von Giorgio Parisi, Spektrum der Wissenschaft vom 28.09.2022.

Gillessen, S.: Facettenreiche Zeit. Rezension des Buches "Chronos" von Guido Tonelli, Spektrum der Wissenschaft vom 13.10.2022.

Gillessen, S.: Keine Einführung in die Gammaastronomie. Rezension des Buches "Rätselhafte Himmelsobjekte" von Wilfried Domainko, Spektrum der Wissenschaft vom 8.12.2022.

Telegramme / Zirkulare / Datenkataloge

Goodwin A. G. Anderson, J. Miller-Jones, Z. Liu, A. Malayi, and A. Rau : ATCA radio detection of the TDE AT2022dsb. The Astronomer's Telegram (ATel), 15293 (2022).

Ivlev A. : Non-reciprocity in quasi-two-dimensional complex plasmas. APS 2022 (2022).

Kozyrev A.S., D. V. Golovin, M. L. Litvak, I. G. Mitrofanov, A. B. Sanin, Mgns/Bepicolombo Team, Hend/Mars Odyssey Team, J. Benkhoff, Bepicolombo Team, K. Hurley, Ipn, D. Svinkin, S. Golenetskii, D. Frederiks, A. Ridnaia, A. Lysenko, T. Cline, Konus-Wind Team, A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, INTEGRAL SPI-ACS Grb Team, S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, A. Tohuvavohu, Swift-Bat Team, W. Boynton, C. Fellows, K. Harshman, H. Enos, R. Starr, A. S. Gardner, and Grs-Odyssey Grb Team: Improved IPN localization for GRB 221009A (BepiColombo-MGNS light curve), GCN Circ. 32805 (2022).

Kozyrev A.S., D. V. Golovin, M. L. Litvak, I. G. Mitrofanov, A. B. Sanin, Mgns/Bepicolombo Team, Hend/Mars Odyssey Team, J. Benkhoff, Bepicolombo Team, K. Hurley, Ipn, D. Svinkin, S. Golenetskii, D. Frederiks, A. Ridnaia, A. Lysenko, T. Cline, Konus-Wind Team, A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, INTEGRAL SPI-ACS Grb Team, S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, A. Tohuvavohu, Swift-Bat Team, W. Boynton, C. Fellows, K. Harshman, H. Enos, R. Starr, A. S. Gardner, and Grs-Odyssey Grb Team: IPN triangulation of GRB 221017A (long), GCN Circ. 32787 (2022).

Kozyrev A.S., D. V. Golovin, M. L. Litvak, I. G. Mitrofanov, A. B. Sanin, Mgns/Bepicolombo Team, Hend/Mars Odyssey Team, J. Benkhoff, Bepicolombo Team, K. Hurley, Ipn, D. Svinkin, S. Golenetskii, D. Frederiks, A. Ridnaia, A. Lysenko, T. Cline, Konus-Wind Team, A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, INTEGRAL SPI-ACS Grb Team, S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, A. Tohuvavohu, Swift-Bat Team, W. Boynton, C. Fellows, K. Harshman, H. Enos, R. Starr, A. S. Gardner, and Grs-Odyssey Grb Team: IPN triangulation of GRB 220927A (long), GCN Circ. 32597 (2022).

Kozyrev A.S., D. V. Golovin, M. L. Litvak, I. G. Mitrofanov, A. B. Sanin, Mgns/Bepicolombo Team, Hend/Mars Odyssey Team, J. Benkhoff, Bepicolombo Team, K. Hurley,

Ipn, D. Svinkin, S. Golenetskii, D. Frederiks, A. Ridnaia, A. Lysenko, T. Cline, Konus-Wind Team, A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, INTEGRAL SPI-ACS Grb Team, S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, A. Tohuvavohu, Swift-Bat Team, W. Boynton, C. Fellows, K. Harshman, H. Enos, R. Starr, A. S. Gardner, and Grs-Odyssey Grb Team: IPN triangulation of GRB 220601A (long), GCN Circ. 32163 (2022).

Kozyrev A.S., D. V. Golovin, M. L. Litvak, I. G. Mitrofanov, A. B. Sanin, Mgns/Bepicolombo Team, Hend/Mars Odyssey Team, J. Benkhoff, Bepicolombo Team, K. Hurley, Ipn, D. Svinkin, S. Golenetskii, D. Frederiks, A. Ridnaia, A. Lysenko, T. Cline, Konus-Wind Team, A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, INTEGRAL SPI-ACS Grb Team, S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, A. Tohuvavohu, Swift-Bat Team, W. Boynton, C. Fellows, K. Harshman, H. Enos, R. Starr, A. S. Gardner, and Grs-Odyssey Grb Team: IPN triangulation of GRB 220524A, GCN Circ. 32115 (2022).

Kozyrev A.S., D. V. Golovin, M. L. Litvak, I. G. Mitrofanov, A. B. Sanin, Mgns/Bepicolombo Team, Hend/Mars Odyssey Team, J. Benkhoff, Bepicolombo Team, K. Hurley, Ipn, D. Svinkin, S. Golenetskii, D. Frederiks, A. Ridnaia, A. Lysenko, T. Cline, Konus-Wind Team, A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, INTEGRAL SPI-ACS Grb Team, S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, A. Tohuvavohu, Swift-Bat Team, W. Boynton, C. Fellows, K. Harshman, H. Enos, R. Starr, A. S. Gardner, and Grs-Odyssey Grb Team: IPN triangulation of GRB 220403C, GCN Circ. 31877 (2022).

Kozyrev A.S., D. V. Golovin, M. L. Litvak, I. G. Mitrofanov, A. B. Sanin, Mgns/Bepicolombo Team, Hend/Mars Odyssey Team, J. Benkhoff, Bepicolombo Team, K. Hurley, Ipn, D. Svinkin, S. Golenetskii, D. Frederiks, A. Ridnaia, A. Lysenko, T. Cline, Konus-Wind Team, A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, INTEGRAL SPI-ACS Grb Team, S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, A. Tohuvavohu, Swift-Bat Team, W. Boynton, C. Fellows, K. Harshman, H. Enos, R. Starr, A. S. Gardner, and Grs-Odyssey Grb Team: IPN triangulation of GRB 220305B, GCN Circ. 31713 (2022).

Kozyrev A.S., D. V. Golovin, M. L. Litvak, I. G. Mitrofanov, A. B. Sanin, Mgns/Bepicolombo Team, Hend/Mars Odys-

sey Team, J. Benkhoff, Bepicolombo Team, K. Hurley, Ipn, D. Svinkin, S. Golenetskii, D. Frederiks, A. Ridnaia, A. Lysenko, T. Cline, Konus-Wind Team, A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, INTEGRAL SPI-ACS Grb Team, S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, A. Tohuvavohu, Swift-Bat Team, W. Boynton, C. Fellows, K. Harshman, H. Enos, R. Starr, A. S. Gardner, and Grs-Odyssey Grb Team: IPN triangulation of GRB 220222A, GCN Circ. 31649 (2022).

Kozyrev A.S., D. V. Golovin, M. L. Litvak, I. G. Mitrofanov, A. B. Sanin, Mgns/Bepicolombo Team, Hend/Mars Odyssey Team, J. Benkhoff, Bepicolombo Team, K. Hurley, Ipn, D. Svinkin, S. Golenetskii, D. Frederiks, A. Ridnaia, A. Lysenko, T. Cline, Konus-Wind Team, A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, INTEGRAL SPI-ACS Grb Team, S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, A. Tohuvavohu, Swift-Bat Team, W. Boynton, C. Fellows, K. Harshman, H. Enos, R. Starr, A. S. Gardner, and Grs-Odyssey Grb Team: GCN Circ.draft on GRB 220222A, GCN Circ. 31645 (2022).

Kozyrev A.S., D. V. Golovin, M. L. Litvak, I. G. Mitrofanov, A. B. Sanin, Mgns/Bepicolombo Team, Hend/Mars Odyssey Team, J. Benkhoff, Bepicolombo Team, K. Hurley, Ipn, D. Svinkin, S. Golenetskii, D. Frederiks, A. Ridnaia, A. Lysenko, T. Cline, Konus-Wind Team, A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, INTEGRAL SPI-ACS Grb Team, S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, A. Tohuvavohu, Swift-Bat Team, W. Boynton, C. Fellows, K. Harshman, H. Enos, R. Starr, A. S. Gardner, and Grs-Odyssey Grb Team: IPN triangulation of GRB 220219A, GCN Circ. 31621 (2022).

Kozyrev A.S., D. V. Golovin, M. L. Litvak, I. G. Mitrofanov, A. B. Sanin, Mgns/Bepicolombo Team, Hend/Mars Odyssey Team, J. Benkhoff, Bepicolombo Team, K. Hurley, Ipn, D. Svinkin, S. Golenetskii, D. Frederiks, A. Ridnaia, A. Lysenko, T. Cline, Konus-Wind Team, A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, INTEGRAL SPI-ACS Grb Team, S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, A. Tohuvavohu, Swift-Bat Team, W. Boynton, C. Fellows, K. Harshman, H. Enos, R. Starr, A. S. Gardner, and Grs-Odyssey Grb Team: IPN triangulation of GRB 220209A, GCN Circ. 31598 (2022).

Kozyrev A.S., D. V. Golovin, M. L. Litvak, I. G. Mitrofanov, A. B. Sanin, Mgns/Bepicolombo Team, Hend/Mars Odyssey Team, J. Benkhoff, Bepicolombo Team, K. Hurley, Ipn, D. Svinkin, S. Golenetskii, D. Frederiks, A. Ridnaia, A. Lysenko, T. Cline, Konus-Wind Team, A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, INTEGRAL SPI-ACS Grb Team, S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, A. Tohuvavohu, Swift-Bat Team, W. Boynton, C. Fellows, K. Harshman, H. Enos, and R. Grs-Odyssey Grb Team Starr: IPN triangulation of GRB 220128A (long), GCN Circ. 31536 (2022).

Kozyrev A.S., D. V. Golovin, M. L. Litvak, I. G. Mitrofanov, A. B. Sanin, Mgns/Bepicolombo Team, Hend/Mars Odyssey Team, J. Benkhoff, Bepicolombo Team, K. Hurley, Ipn, D. Svinkin, S. Golenetskii, D. Frederiks, A. Ridnaia, A. Lysenko, T. Cline, Konus-Wind Team, A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, INTEGRAL SPI-

ACS Grb Team, S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, A. Tohuvavohu, Swift-Bat Team, W. Boynton, C. Fellows, K. Harshman, H. Enos, and R. Grs-Odyssey Grb Team Starr: IPN triangulation of GRB 220124A, GCN Circ. 31525 (2022).

Kozyrev A.S., D. V. Golovin, M. L. Litvak, I. G. Mitrofanov, A. B. Sanin, Mgns/Bepicolombo Team, Hend/Mars Odyssey Team, J. Benkhoff, Bepicolombo Team, K. Hurley, Ipn, D. Svinkin, S. Golenetskii, D. Frederiks, A. Ridnaia, A. Lysenko, T. Cline, Konus-Wind Team, A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, INTEGRAL SPI-ACS Grb Team, S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, A. Tohuvavohu, Swift-Bat Team, W. Boynton, C. Fellows, K. Harshman, H. Enos, and R. Grs-Odyssey Grb Team Starr: IPN triangulation of a bright burst from SGR 1935+2154, GCN Circ. 31512 (2022).

Kozyrev A.S., D. V. Golovin, M. L. Litvak, I. G. Mitrofanov, A. B. Sanin, Mgns/Bepicolombo Team, Hend/Mars Odyssey Team, J. Benkhoff, Bepicolombo Team, K. Hurley, Ipn, D. Svinkin, S. Golenetskii, D. Frederiks, A. Ridnaia, A. Lysenko, T. Cline, Konus-Wind Team, A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, INTEGRAL SPI-ACS Grb Team, S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, A. Tohuvavohu, Swift-Bat Team, W. Boynton, C. Fellows, K. Harshman, H. Enos, and R. Grs-Odyssey Grb Team Starr: IPN triangulation of GRB 211226A, GCN Circ. 31510 (2022).

Liu Z.: SGR/eROSITA non-detection of the tidal disruption event AT2021yte. The Astronomer's Telegram (ATel), 15164 (2022).

Liu Z.: SRG/eROSITA detection of the tidal disruption event AT2022dsb. The Astronomer's Telegram (ATel), 15259 (2022).

Nicuesa Guelbenzu A., S. Klose, A. Rau: GRB 220117A, GROND observations. GCN Circ., 31522 (2022).

Nicuesa Guelbenzu A., S. Klose, A. Rau: GRB 220627A, GROND observations. GCN Circ., 32304 (2022).

Nicuesa Guelbenzu A., S. Klose, A. Rau: GRB 220706A, GROND observations. GCN Circ., 32339 (2022).

Nicuesa Guelbenzu A., S. Klose, A. Rau: GRB 220711B, GROND observations. GCN Circ., 32383 (2022).

Svinkin D., D. Frederiks, A. Ridnaia, A. Lysenko, T. Cline, Konus-Wind Team, A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, INTEGRAL SPI-ACS Team, A. Goldstein, M. S. Briggs, C. Wilson-Hodge, Fermi Gbm Team, S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, A. Tohuvavohu, and Swift-Bat Team: IPN triangulation of GRB 220308A (long / very bright), GCN Circ. 31715 (2022).

Svinkin D., D. Frederiks, A. Ridnaia, A. Lysenko, T. Cline, Konus-Wind Team, A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, INTEGRAL SPI-ACS Team, A. Goldstein, M. S. Briggs, C. Wilson-Hodge, Fermi Gbm Team, S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, A. Tohuvavohu, and Swift-Bat Team: IPN triangulation of GRB 220203A (short), GCN Circ. 31549 (2022).

- Svinkin D., D. Frederiks, A. Ridnaia, A. Lysenko, T. Cline, Konus-Wind Team, A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, INTEGRAL SPI-ACS Team, A. Goldstein, M. S. Briggs, C. Wilson-Hodge, Fermi Gbm Team, S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, A. Tohuvavohu, and Swift-Bat Team: IPN triangulation of GRB 220130A, GCN Circ. 31548 (2022).
- Svinkin D.; D. Frederiks, A. Ridnaia, A. Lysenko, T. Cline, Konus-Wind Team, A. von Kienlin, X. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, INTEGRAL SPI-ACS Team, A. Goldstein, M. S. Briggs, C. Wilson-Hodge, Fermi Gbm Team, S. Barthelmy, J. Cummings, H. Krimm, D. Palmer, A. Tohuvavohu, and Swift-Bat Team: IPN triangulation of extremely bright GRB 221009A, GCN Circ. 32641 (2022).
- Tadaki, K.-I., S. Belli, A. Burkert, A. Dekel, N.M. Förster Schreiber, R. Genzel, M. Hayashi, R. Herrera-Camus, T. Kodama, K. Kohno, Y. Koyama, M.M. Lee, D. Lutz, L. Mowla, E.J. Nelson, A. Renzini, T.L. Suzuku, L.J. Tacconi, H. Übler, E. Wisnioski et al.: ALMA obs. Of UDS and GOOD-S massive galaxies. *VizieR Online Data Catalog J/ApJ*, 90, 74 (2022).
- Tamassia F., L. Bizzocchi, M. Melosso, M. Martin-Drumel, O. Pirali, A. Pietropolli Charmet, E. Canè, L. Dore, I.E. Gordon, J. Guillemin, B.M. Giuliano, P. Caselli, S. Alessandrini, V. Barone, C. Puzzarini: Synchrotron-based far-infrared spectroscopy of HC_3N : Extended ro-vibrational analysis and new line list up to 3360 cm^{-1} . *Journal of Quantitative Spectroscopy and Radiation Transfer* 279 (2022).
- von Kienlin A. and Fermi GBM Team: Fermi Gamma-ray Burst Monitor trigger 663917434/220115230 is not a GRB, GCN Circ. 31450 (2022).
- von Kienlin A. and Fermi GBM Team: Fermi Gamma-ray Burst Monitor trigger 220111325/663580106 is not a GRB, GCN Circ. 31432 (2022).
- von Kienlin A. and Fermi GBM Team: Fermi GBM trigger 681633544/220808277 is not a GRB, GCN Circ. 32448 (2022).
- von Kienlin A. and Fermi GBM Team: Fermi GBM trigger 681719116/220809267 is not a GRB, GCN Circ. 32451 (2022).
- von Kienlin A. and Fermi GBM Team: Fermi GBM trigger 681890304/220811249 is not a GRB, GCN Circ. 32457 (2022).
- von Kienlin A. and Fermi GBM Team: Fermi GBM trigger 686565116/221004355 is not a GRB, GCN Circ. 32621 (2022).
- von Kienlin A., C. Meegan, and Fermi GBM Team: GRB 220421A: Fermi GBM observation, GCN Circ. 31936 (2022).
- von Kienlin A., C. Meegan, and Fermi GBM Team: GRB 221126A: Fermi GBM observation, GCN Circ. 32994 (2022).

Poster

- Alberton, D.: High-resolution rotational spectroscopy of Aminoacrylonitrile, an amino-acid precursor candidate. EUROPEAN ASTRONOMICAL SOCIETY ANNUAL MEETING, 06/2022.
- Aydar, C.: Single-density photoionization models are not complex enough to describe AGN. Multi-phase, Multi-temperature and Complex: how AGN feedback shapes the nature of the circum-galactic and halo gas in galaxy groups/ ESO, Virtual Meeting, Garching, Germany, 12/2022.
- Biondi, F.: Verification Strategy for MICADO Cold Optics. SPIE Astronomical Telescopes + Instrumentation, Montreal, Canada, 07/2022.
- Camilloni, F.: SRG/eROSITA observation of Vela Jr.. 1st Mondragone Frontiers of Astronomy Series: "Latest Advances in X-ray Spectroscopy and Polarimetry", Virtual Meeting, Frascati, Italy, 05/2022.
- Cao, Y.: SMBH Masses from GRAVITY Observations of the Hot Dust around AGNs. In Situ View of Galaxy Formation 2, Schloss Ringberg, Bavaria, Germany, 07/2022.
- Collmar, W.: Searching the COMPTEL Data for Fermi/LAT 1FLE Sources. 10th International Fermi Symposium, Johannesburg, South Africa, 10/2022.
- Esposito, M.: Extension of evolution mapping to velocity statistics. COSMO'22, Rio de Janeiro, Brasil, 08/2022.
- Esposito, M.: Extension of evolution mapping to velocity statistics. XV Tonale Winter School on Cosmology, Passo del Tonale, Italy, 12/2022.
- Ferrer Asensio, J.: Tracing the contraction of the pre-stellar core L1544 with HC170+ J = 1-0 emission. From Clouds to Planets II: The Astrochemical Link/ Max-Planck-Institute, Berlin, Germany, 10/2022.
- Freyberg, M.: SRG/eROSITA micrometeoroid hits and effects. Space Telescopes and Instrumentation 2022: Ultraviolet to Gamma Ray / SPIE, Montreal, Canada, 07/2022.
- Giers, K.G.: A comparison of the deuteration in the pre-stellar core L1544 and the protostellar core HH211. EAS 2022, 07/2022.
- Giers, K.G.: A comparison of the deuteration in the pre-stellar core L1544 and the protostellar core HH211. From Clouds to Planets II, 10/2022.
- Jensen, S.: Matching theory to observations: A 3D physico-chemical model of the pre-stellar core L1544. From Clouds to Planets II: The Astrochemical Link (MPE), Har nack Haus, DE, 10/2022.
- Kravchenko, K.: The on-sky performance of the IFU spectrograph ERIS/SPIFFIER during its commissioning phase. SPIE, Montreal, Canada, 07/2022.
- Lattanzi, V.: Jet unveiled in OMC-2 FIR4 and its link to the enhanced cosmic-ray ionisation rate. European Astronomical Society Annual Meeting, Virtual Meeting, Valencia, Spain, 06/2022.
- Lee, L.: Disk kinematics at high-z: comparing fitting techniques and modeling tools. In Situ View of Galaxy Formation 2/ MPE, Schloss Ringberg, Germany, 07/2022.
- Mayer, M.: Revealing the conditions of shocked plasma in the supernova remnant Puppis A with SRG/eROSITA. EAS Meeting 2022, Virtual Meeting, Valencia, Spain, 06/2022.
- Rab, Ch.: Interpreting H₂ and [O I] line emission of T Tauri disks with photo-evaporative disk wind models. Inside 2022 - The Inner Regions of Protoplanetary Disks, Schloss Ringberg, Germany, 09/2022.
- Rab, Ch.: Impact of energetic particle events on the chemistry of planet-forming disks and their observational signatures. From Clouds to Planets II: The Astrochemical Link, Berlin, Germany, 10/2022.
- Redaelli, E.: THE CORE POPULATION AND KINEMATICS OF A. 7th Chile-Cologne-Bonn-Symposium: Physics and Chemistry of Star Formation, Puerto Varas, Chile, 09/2022.
- Seppi, R.: Offset between X-ray and optical centers in clusters of galaxies with eROSITA. Multi-phase, Multi-temperature and Complex: how AGN feedback shapes the nature of the circum-galactic and halo gas in galaxy groups, Virtual Meeting, ESO - Garching, Germany, 12.2022.
- Sipilä, O.: Revised models for cosmic ray induced desorption in dense clouds. From Clouds to Planets II: The Astro-chemical Link, Berlin, Germany, 10/2022.
- Spezzano, S.: 15N fractionation traces isotope-selective photodissociation towards a pre-stellar core. Multi-line Diagnostics of the Interstellar Medium, Nice, France, 04/2022.
- Tabatabaei Mazraeh No, F. S.: The kinematics of the magnetised protostellar core IRAS15398-3359. EAS ANNUAL MEETING 2022, Virtual Meeting, Valencia, Spain, 06/2022.
- Tabatabaei Mazraeh No, F. S.: The kinematics of the magnetised protostellar core IRAS15398-3359. INSTITUT DE RADIO ASTRONOMIE MILLIMETRIQUE, Nice, France, 04/2022.
- Valdivia Mena, Maria: Asymmetric infalls discovered towards a Class I protostar in NGC1333. Multi-line diagnostics of the interstellar medium, Nice, France, 04/2022.
- Zhang, Yi: Study the hot extended X-ray emission around z<0.1 galaxies with eRASS1 data. Annual Meeting of the Astronomische Gesellschaft 2022, Bremen, Germany, 09/2022.

Vorträge

- Alberton, D.: High-resolution rotational spectroscopy of APN, a promising amino- acid precursor. Contributed Talk, 26th International Conference on High Resolution Molecular Spectroscopy, Praha, czech republic, August 2022.
- Arcodia R., : X-ray blasts from awakening massive black holes. Colloquium, Hypatia Colloquium 2022, online, April 2022.
- Becker, Werner: Highlights from the eROSITA ISM-SNR Working Group. Invited Talk, eROSITA Consortium Meeting, Bamberg, Germany, November 2022.
- Becker, W.: eROSITA, ein deutsches Röntgenteleskop für die Erforschung des Universums. Public Talk, VHS Planegg, Planegg, Deutschland, October 2022.
- Becker, W.: Schwarze Löcher, gefräßige Monster im All?. Public Talk, VHS Planegg, Planegg, Deutschland, April 2022.
- Biltzinger, B.: Time-Resolved Spectral Catalogue of INTEGRAL/SPI GRBs. Contributed Talk, INTEGRAL 20 years - Two decades of high-energy astronomy with INTEGRAL, Darmstadt, Germany, October 2022.
- Boller, Th.: Was wissen wir über Schwarze Löcher. Public Talk, Volkshochschule Hallbergmoos, Hallbergmoos, Germany, May 2022.
- Bulbul, E.: eROSITA to Athena: Cluster Science and Cosmology with X-ray Surveys. Invited Talk, European Astronomical Society Meeting, Valencia, Spain, June 2022.
- Bulbul, E.: Tracing Baryons in Clusters of Galaxies with eROSITA. Invited Talk, Galaxy Clusters 2022: Challenging Our Cosmological Perspectives, Baltimore, USA, April 2022.
- Bulbul, E.: Tracing Baryons in Clusters of Galaxies with eROSITA. Invited Talk, AAS HEAD Meeting, Pittsburg, USA, March 2022.
- Camilloni, F.: SRG/eROSITA and XMM-Newton observations of Vela Jr.. Contributed Talk, 15th Bonn workshop 'Neutron stars and local environment', Bonn, Germany, August 2022.
- Cao, Y.: Resolved measurements of hot dust structure sizes around AGNs from GRAVITY observations. Contributed Talk, Torus2022, Leiden, Netherland, December 2022.
- Caselli, P.: From Clouds to Planets: the Astrochemical Link. Colloquium, University of Cologne, Cologne, Germany, January 2022.
- Caselli, P.: The calm before the storm: from clouds to protoplanetary disks. Colloquium, Harvard-Smithsonian Center for Astrophysics, Cambridge, USA, May 2022.
- Caselli, P.: From Clouds to Planets: the Astrochemical Link. Colloquium, INAF, Osservatorio Astrofisico di Arcetri, Florence, Italy, November 2022.
- Caselli, P.: Almost complete freeze-out in a pre-stellar core. Contributed Talk, The Early Phases of Star Formation, Ringberg, Germany, April 2022.
- Caselli, P.: Our Astrochemical Origins. Invited Talk, European Astrobiology Institute, online,, January 2022.
- Caselli, P.: Astrochemistry at the dawn of star and planet formation. Invited Talk, Multiline Diagnostics of the Interstellar Medium, Nice, France, April 2022.
- Caselli, P.: Astrochemistry: from pre-stellar cores to planets and life. Invited Talk, ESO@60: A stairway to the Universe - European Astronomical Society Annual Meeting, Valencia, Spain, June 2022.
- Caselli, P.: The S-journey, from diffuse clouds to pre-stellar cores and beyond. Invited Talk, Lorentz Center Workshop: Tracing sulfur from molecular clouds to the origins of life, Leiden, The Netherland, September 2022.
- Caselli, P.: My astrochemical journey. Public Talk, Massa Marittima High School Library, Massa Marittima, Italy, April 2022.
- Caselli, P.: Making life from stardust. Public Talk, Blaauw Public Lecture, Groningen, The Netherlands, November 2022.
- Caselli, P.: What our knowledge of the origins of life can tell us about life on Earth and its future. Public Talk, The Future of Life - Nobel Week Dialogue, Stockholm, Sweden, December 2022.
- Caselli, P.: Existential risks (nuclear war, climate change, disease, AI, threats from space). Public Talk, The Future of Life - Nobel Week Dialogue, Stockholm, Sweden, December 2022.
- Caselli, P.: Life elsewhere. Public Talk, The Future of Life - Nobel Week Dialogue, Stockholm, Sweden, December 2022.
- Collmar, W.: COMPTEL Data Analysis: A Status Report. Colloquium, Colloquium COSI Team, University of California, Berkeley, USA, Garching (Talk via Zoom), Germany, August 2022.
- Comparat, J.: X-ray large scale structure: observations and simulations. Contributed Talk, Cosmology and numerical simulations @ MIAPP, Garching bei München, Germany, May 2022.
- Comparat, J.: The hot circum-galactic medium around galaxies at $0.05 < z < 0.3$. Invited Talk, SAB Fachbeirat, Garching bei München, Germany, June 2022.
- Comparat, J.: X-ray large scale structures: observations and simulations. Contributed Talk, Cosmology from home conference, online, July 2022.
- Comparat, J.: The cosmic web of X-ray AGNs. Invited Talk, COSPAR, Athens, Greece, July 2022.
- Comparat, J.: The hot circum-galactic medium around ga-

- laxies at $0.05 < z < 0.3$. Contributed Talk, COSPAR, Athens, Greece, July 2022.
- Comparat, J.: The cosmic web of galaxies seen in X-ray by eROSITA. Invited Talk, IAU, division J (online participation), Busan, Korea, August 2022.
- Comparat, J.: The cosmic web of X-ray AGN. Contributed Talk, Deutsche AG, Bremen, Germany, Sept 2022.
- Comparat, J.: Overview of legacy survey DR10. Contributed Talk, 4MOST all hands meeting, Potsdam, Germany, Sept 2022.
- Comparat, J.: Overview of legacy survey DR10. Contributed Talk, eROSITA collaboration meeting, Bamberg, Germany, November 2022.
- Comparat, J.: X-ray emission around star-forming & quiescent galaxies at $0.05 < z < 0.3$. Contributed Talk, Athena collaboration meeting, Barcelona, Spain, November 2022.
- Comparat, J.: Consortium Survey 5. eROSITA galaxy cluster survey. Invited Talk, 4MOST science presentations <https://www.4most.eu/cms/news/2022/science-presentations/>, online, November 2022.
- Comparat, J.: Review talk. The elusive hot phase of the CGM and its interplay with the AGN feedback (review with an X-ray eROSITA focus). Invited Talk, Multi-phase, Multi-temperature and Complex: how AGN feedback shapes the nature of the circum-galactic and halo gas in galaxy groups, Garching bei München, Germany, December 2022.
- Comparat, J.: The cosmic web of X-ray AGN. Contributed Talk, Multi-phase, Multi-temperature and Complex: how AGN feedback shapes the nature of the circum-galactic and halo gas in galaxy groups, Garching bei München, Germany, December 2022.
- Correa, C.M.: Cosmic voids as cosmological laboratories. Colloquium, Cosmology Seminar / University of Oslo, Oslo, Norway, November 2022.
- Correa, C.M.: Cosmic voids as cosmological laboratories. Contributed Talk, Dark Energy Connector Science Day / Excellence Cluster ORIGINS, Munich, Germany, November 2022.
- Correa, C.M.: Cosmic voids as cosmological laboratories. Invited Talk, 64th Annual Meeting / Asociación Argentina de Astronomía / PhD Thesis Prize, Buenos Aires, Argentina, September 2022.
- Correa, C.M.: Cosmic voids as cosmological laboratories. Invited Talk, Workshop on Classical Gravity and Applications / ICTP SAIFR / PhD Thesis Prize, São Paulo, Brasil, August 2022.
- Correa, C.M.: Redshift-space effects in voids and their impact on cosmological tests. Contributed Talk, Cosmorus VI / Astronomical Observatory of Córdoba, Córdoba, Argentina, April 2022.
- Davies, R.: ERIS, MICADO, and a View towards visible AO. Invited Talk, Keck Diffraction-Limited Visible-Light Roadmap, online, USA, April 2022.
- Davies, R.: MICADO and MAORY: ELT first light imager and MCAO system. Invited Talk, Solar System Science with the ELT, online, Germany, April 2022.
- Davies, R.: The final design of MICADO, the first light ELT camera. Contributed Talk, Ground-based and Airborne Instrumentation for Astronomy IX, Montreal, Canada, April 2022.
- Davies, R.: ERIS first light results. Invited Talk, Adaptive Optics Systems VIII, Montreal, Canada, April 2022.
- Dennerl, K.: eROSITA Calibration and First Results. Invited Talk, IACHEC Special Plenary Talks (<https://iachec.org/special-plenary-talks/>), (remote), (remote), April 2022.
- Drescher, A.: Imaging of faint stars in the Galactic Center with GRAVITY. Contributed Talk, Exeter, UK, April 2022.
- Drescher, A.: GRAVITY+ Wide: Towards hundreds of $z \sim 2$ AGN. Contributed Talk, Montréal, Canada, July 2022.
- Drescher, A.: Infrared Interferometry of the Galactic Center Black Hole. Contributed Talk, Bremen, Germany, September 2022.
- Drescher, A.: Tracing the orbits of stars within 100 mas of Sgr A* with GRAVITY. Invited Talk, Fachbeirat 2022, Munich, Germany, June 2022.
- Drescher, A.: Stars within the inner 250 mas of Sgr A*. Invited Talk, Observing the Universe in Motion: 5 Years of GRAVITY, Kreuth, Germany, October 2022.
- Drescher, A.: GRAVITY am Very Large Telescope Interferometer. Public Talk, Munich, Germany, July 2022.
- Drescher, A.: GRAVITY am Very Large Telescope Interferometer. Public Talk, Munich, Germany, October 2022.
- Eisenhauer, F.: The Galactic Center black hole, the effects of General Relativity, and how to observe them. Colloquium, Séminaire général de physique de l'Institut Polytechnique de Paris, Paris, Palaiseau, France, December 2022.
- Eisenhauer, F.: 5 Years of GRAVITY – A Revolution in High Angular Resolution Astronomy. Invited Talk, Observing the Universe in Motion: 5 Years of GRAVITY, Schloss Ringberg, Germany, October 2022.
- Eisenhauer, F.: GRAVITY Results on SgrA*, EHT - Gravity meeting on SgrA*. Invited Talk, Nijmegen, The Netherlands, September 2022.
- Eisenhauer, F.: A New Era of High Angular Resolution Astronomy, Gruber Cosmology Prize Lecture. Invited Talk, IAU XXXIst General Assembly, Busan, Republic of Korea, August 2022.
- Eisenhauer, F.: Infrared Interferometry of the Galactic Center Black Hole. Invited Talk, 23rd International Conference on General Relativity and Gravitation, Beijing (Remote), People's Republic of China, July 2022.
- Eisenhauer, F.: A New Era of Interferometry with GRAVITY+, Why Large Telescopes are Good for Interferometry. Invited Talk, Genzel @ 70 Conference, Schloss Ringberg, Germany, June 2022.
- Eisenhauer, F.: The Richness and Power of Near Infrared

- Interferometry, Assembling the ngEHT: Community-Driven Science to a Global Instrument. Invited Talk, EHT Meeting, Granada, Spain, June 2022.
- Eisenhauer, F.: A New Era of Interferometry with GRAVITY(+). Colloquium, Colloquium, Osservatorio Astrofisico di Arcetri, Florence, Italy, May 2022.
- Eisenhauer, F.: Exploring the Supermassive Black Hole at the Centre of the Milky Way. Public Talk, The Sharpest Eyes on the Sky Conference, Exeter, United Kingdom, April 2022.
- Eisenhauer, F.: Astronomy at Highest Angular Resolution Adaptive Optics, Interferometry and Black Hole. Invited Talk, Stern-Gerlach Medal Prize Talk, DPG Frühjahrstagung, Heidelberg (Remote), Germany, March 2022.
- Eisenhauer, F.: A New Era of Interferometry with GRAVITY(+). Colloquium, Astralis Colloquium, Remote, Australia, February 2022.
- Endres, C. P.: THE SOLEIL VIEW ON PROTOTYPICAL ORGANIC NITRILES: THE ^{13}C SPECIES OF ETHYL CYANIDE. Contributed Talk, 76th International Symposium on Molecular Spectroscopy, Urbana, USA, June 2022.
- Esposito, M.: Extension of evolution mapping to velocity statistics. Invited Talk, Dark Energy Connector (CN-4) Science Day, Garching bei Munchen, Germany, November 2022.
- Ferrer Asensio, J.: Millimetre and sub-millimetre spectroscopy of doubly deuterated acetaldehyde (CHD_2CHO) and first detection towards IRAS 16293-2422. Colloquium, Tokyo, Japan, December 2022.
- Ferrer Asensio, J.: Millimetre and sub-millimetre spectroscopy of doubly deuterated acetaldehyde (CHD_2CHO) and first detection towards IRAS 16293-2422. Contributed Talk, Prague, Czech Republic, August 2022.
- Ferrer Asensio, J.: Millimetre and sub-millimetre spectroscopy of doubly deuterated acetaldehyde (CHD_2CHO) and first detection towards IRAS 16293-2422. Contributed Talk, Online, June 2022.
- Freund, S.: The stellar content of the first eROSITA all-sky survey. Contributed Talk, Annual Meeting of the Astronomische Gesellschaft 2022, Bremen, Germany, September 2022.
- Friedrich, P.: X-ray test and calibration of the Einstein Probe Follow-up telescope. Contributed Talk, International Workshop on Astronomical X-ray Optics, Prague, Czech Republic, August 2022.
- Förster Schreiber, N. M.: Dust, gas, SFR, and dynamical properties of high- z galaxies. Invited Talk, The Growth of Galaxies in the Early Universe – VII, Sesto, Italy, March 2022.
- Förster Schreiber, N. M.: Galaxy dynamics at cosmic noon. Invited Talk, Festive Colloquium at Ringberg Castle celebrating Reinhard Genzel's career and 70th birthday, Ringberg, Germany, June 2022.
- Förster Schreiber, N. M.: Stellar feedback and galaxy evolution at high z : observational perspective. Invited Talk, A Holistic View of Stellar Feedback and Galaxy Evolution, Ascona, Switzerland, July 2022.
- Förster Schreiber, N. M.: Outflows and inflows in $z\sim 1-3$ star-forming galaxies. Invited Talk, In Situ View of Galaxy Formation 2, Ringberg, Germany, July 2022.
- Förster Schreiber, N. M.: Star-forming galaxies at cosmic noon. Invited Talk, Alvia@80 – Of Stars and Galaxies: Open Routes and Future Horizons Charted by a Curious Venetian Explorer, Chania, Crete, Greece, September 2022.
- Förster Schreiber, N. M.: Clumps in high- z galaxies: an observational perspective. Invited Talk, MIAPP Workshop: Star-forming Clumps and Clustered Starbursts Across Cosmic Time, Garching, Germany, October 2022.
- Förster Schreiber, N. M.: Star Forming Galaxies at Cosmic Noon. Colloquium, INAF/Osservatorio Astrofisico di Arcetri, Florence, Italy, April 2022.
- Förster Schreiber, N. M.: Star Forming Galaxies at Cosmic Noon. Colloquium, Max-Planck-Institut fuer Astrophysik, Special Seminar Series on Galaxy Formation, Garching, Germany, May 2022.
- Förster Schreiber, N. M.: Star Forming Galaxies at Cosmic Noon. Colloquium, Astronomy & Atmospheric Physics, National Space Institute, Technical University of Denmark, Lyngby, Denmark, 18.05.2022.
- Förster Schreiber, N. M.: Star Forming Galaxies at Cosmic Noon. Colloquium, Sydney Institute for Astronomy, University of Sydney, Australia, Sydney, Australia, 28.10.2022.
- Genzel, R.: A 40-Year Journey. Invited talk (remote), The National Academy of Sciences India, Delhi Chapter, India, January 2022.
- Genzel, R.: Eine 40-jährige Reise. Invited Nobel talk (remote), 25. Bad Honnefer Winterseminare, Bad Honnef, Germany, January 2022.
- Genzel, R.: Nobel LAB 360Grad. Invited Talk, film- and multimedia project for the Lindau Nobel Laureate Meetings (recorded speech and interview), Garching, Germany, February 2022.
- Genzel, R.: Nobel Talks. Invited Talk (remote), Students Union of Instituto Superior Técnico (AEIST), University of Lisbon, Lisbon, Portugal, March 2022.
- Genzel, R.: Galaxien und schwarze Löcher. Invited lecture (remote), vhs wissen life, Ottobrunn, Germany, March 2022.
- Genzel, R.: The European Southern Observatory: current and future capabilities. Invited Talk (remote), Israeli Academy for Sciences, Jerusalem, Israel, March 2022.
- Genzel, R.: Galaxien und schwarze Löcher. Invited Talk (remote), Netzwerk Teilchenwelt, Wuppertal, Germany, March 2022.
- Genzel, R.: AHA Momente. Invited Talk, recorded interview for the BIOTOPIA exhibition at Schloss Nymphenburg, Munich, Germany, March 2022.

Genzel, R.: A 40-Year Journey. Colloquium (remote) at Albert Einstein Institute (AEI), Potsdam-Golm, Germany, March 2022.

Genzel, R.: Testing General Relativity and the Existence of Black holes with Large Telescopes and Interferometry. Invited Talk, ESFRI Conference, Paris, France, March 2022.

Genzel, R.: Cosmic evolution of dense gas and of star forming disk galaxies. Invited Talk, Observatoire de Paris, Paris, France, March 2022.

Genzel, R.: A 40-Year Journey. Invited Talk, Académie des Sciences, Paris, France, March 2022.

Genzel, R.: Grußwort. Invited Talk, Fachtagung Quantenphysik und gymnasiale Bildung, Munich, Germany, April 2022.

Genzel, R.: Significance and evolution of molecular gas during the star formation noon. Invited Talk, IRAM conference: Multi-line Diagnostics of the Interstellar Medium, Nice, France, April 2022.

Genzel, R.: State of the field and the role of the IRAM Community. Invited Talk, IRAM conference: Multi-line Diagnostics of the Interstellar Medium, Nice, France, April 2022.

Genzel, R.: A 40-Year Journey. Invited talk (remote), Puerto de Ideas Science Festival Antofagasta, Antofagasta, Chile, April 2022.

Genzel, R.: Galaxien und schwarze Löcher. Public talk, Kulturhaus Laupheim, Laupheim, Germany, April 2022.

Genzel, R.: Eine 40-jährige Reise. Invited Talk, Spendengala Planetarium Laupheim, Laupheim, Germany, April 2022.

Genzel, R.: Das Schwarze Loch im Galaktischen Zentrum als Testobjekt der Relativitätstheorie: Eine vierzigjährige Reise. Invited Talk, DLR, Köln, Cologne, Germany, May 2022.

Genzel, R.: A 40-Year Journey. Invited Talk, ELEMENTS Annual Conference, Frankfurt am Main, Germany, May 2022.

Genzel, R.: Galaxien und schwarze Löcher. Public Talk, University of Frankfurt, Frankfurt am Main, Germany, May 2022.

Genzel, R.: A 40-Year Journey. Invited Talk, MPI Festkörper, Stuttgart, Germany, May 2022.

Genzel, R.: Eine 40-jährige Reise. Invited Talk, PLANCKS22, LMU Muenchen, Munich, Germany, May 2022

Genzel, R.: Eine 40-jährige Reise. Invited Talk, Symposium 100 Jahre Einstein, Einstein-Center, Ulm, Germany, May 2022.

Genzel, R.: A 40-Year Journey. Invited Talk (remote), Frontiers of Fundamental Physics (FFP15), University of Istanbul, Istanbul, Turkey, May 2022.

Genzel, R.: Galaxien und schwarze Löcher. Invited Talk,

Symposium Würzburger Wissenschaftliche Gesellschaft, Würzburg, Germany, May 2022.

Genzel, R.: Nobel Lecture: A 40-Year Journey. Invited Talk (remote), University of Gothenburg Chalmers, Gothenburg, Sweden, June 2022.

Genzel, R.: The Formation and Evolution of Star-Forming Galactic Disks. Invited Talk (remote), Conference: From Stars to Galaxies, Gothenburg, Sweden, June 2022.

Genzel, R.: Plans for the Next 40 Years and Other Musings. Invited Talk, Ringberg Festive Colloquium for Reinhard Genzel's 70th Birthday, Tegernsee, Germany, June 2022.

Genzel, R.: A 40-Year Journey. Invited Talk, ISD Research Retreat, Ammersee, Germany, June 2022.

Genzel, R.: Cosmic evolutions of star-forming disk galaxies: What have we learned from observations? Contributed Talk, In Situ Galaxy II, Ringberg Colloquium, Tegernsee, Germany, July 2022.

Genzel, R.: Galaxien und schwarze Löcher. Invited Talk, Berthold-Gymnasium, Freiburg i.B., Germany, July 2022.

Genzel, R.: Eine 40-jährige Reise. Invited Talk (remote), Lehrerfortbildung Physik- und Astronomie-Didaktik an der Physikalisch-Astronomischen Fakultät der Friedrich-Schiller-Universität Jena, Jena, Germany, July 2022.

Genzel, R.: Star-forming disk galaxies at cosmic noon. Invited Talk, Santa Cruz Galaxy Workshop, Santa Cruz, CA, USA, August 2022.

Genzel, R.: Forschung am Max Planck Institut für extraterrestrische Physik, Invited Talk, official visit of Stm. Florian Herrmann at Max-Planck-Institute for Extraterrestrial Physics, Garching, Germany, September 2022.

Genzel, R.: The formation and evolution of star-forming galactic disks. Invited Talk (remote), Alvio@80 Conference, Crete, Greece, September 2022.

Genzel, R.: The Black Hole at the Galactic Center. Invited Talk, Pontifical Academy of Sciences Plenary Session 2022, Vatican City, September 2022.

Genzel, R.: A 40-Year Journey. Invited Talk, World General Congress for Optics and Photonics of the International Commission for Optics (ICO) and the international society on Optics Within Life Sciences (OWLS), Dresden, Germany September 2022.

Genzel, R.: Eine 40-jährige Reise zum Zentrum der Milchstraße. Invited Talk, Gesellschaft Deutscher Naturforscher und Ärzte, GDNÄ, Leipzig, Germany, September 2022.

Genzel, R.: A 40-Year Journey. Invited Talk, Lindau Lecture, Heidelberg Laureate Forum, Heidelberg, Germany, September 2022.

Genzel, R.: Building up the Observing Power of IRAM (per aspera ad astra). Invited Talk at NOEMA Inauguration, SuperDevoluy, France, September 2022.

Genzel, R.: The formation and evolution of star-forming

- galaxies. Colloquium, Studierendenseminar, Heinrich-Herz-Professur, Karlsruher Institut für Technologie (KIT), Karlsruhe, Germany, October 2022.
- Genzel, R.: Galaxien und schwarze Löcher. Invited Talk, Heinrich-Herz-Professur, Karlsruher Institut für Technologie (KIT), Karlsruhe, Germany, October 2022.
- Genzel, R.: Eine 40-jährige Reise. Invited Talk, Volkssternwarte München, München, Germany, October 2022.
- Genzel, R.: The Galactic Center with GRAVITY. Invited Talk, Workshop: Observing the Universe in Motion – 5 Years of GRAVITY, Ringberg, Tegernsee, Germany, October 2022.
- Genzel, R.: The Cosmic Evolution of Galaxies and their Central Black Holes. Colloquium, IMPRS Lectures, November 2022
- Genzel, R.: The Formation and Evolution of Galaxies and Massive Black Holes. Invited Talk, (remote), WE-Heraeus-Symposium, Berlin, Germany, November 2022.
- Genzel, R.: MINT-Fächer fördern, Zukunftschancen schaffen. Invited Talk, Podiumsdiskussion, MIT Club of Germany, Residenz, München, Germany, November 2022.
- Genzel, R.: Eine 40jährige Reise. Invited Talk, MIT Club of Germany, Deutsches Museum, München, Germany, November 2022.
- Genzel, R.: Galaxien und Schwarze Löcher. Invited Talk, Planetarium Mannheim, Mannheim, Germany, November 2022.
- Genzel, R.: Galaxien und Schwarze Löcher – unsichtbare Supermasse in unserer Galaxie. Invited Talk, Deutsch-Amerikanisches Institut, Heidelberg, Germany, November 2022.
- Genzel, R.: A 40-Year Journey. Invited Talk, colloquium at Österreichische Akademie der Wissenschaften, Wien, November 2022.
- Genzel, R.: Astrophysik und Kosmologie in unserer Milchstraße und darüber hinaus. Invited Talk, followed by moderated discussion with Ulrich Walter, Großveranstaltung mit Schulwerk Augsburg, Reach for the stars – Astrophysik und Raumfahrttechnik hautnah, Augsburg, Germany, November 2022.
- Genzel, R.: A 40-Year Journey: from challenging experiments to fundamental astrophysics results. Invited Talk, Stockholm University, Sweden, December 2022
- Genzel, R.: Our Road to the Nobel Prize. Invited Talk, panel discussion with physics and chemistry laureates 2020 and 2021, seminar for young researchers, Stockholm, Sweden, December 2022.
- Genzel, R.: The Galactic Center Black Hole. Invited Talk, panel discussion, Uppsala University, December 2022.
- Genzel, R.: Galaxien und Schwarze Löcher. Invited Talk (remote), Kamingespräch Q+Workshop-Reihe „Big Thoughts“, University of Mainz, Mainz, Germany, December 2022.
- Genzel, R.: Status & Future of the MPE-IR Group: from challenging experiments to fundamental astrophysics results. Invited Talk, MPE/MPA Kuratorium, December 2022
- Gerhard, O.: What is the origin of the bar/bulge stellar population around the Galactic Centre?. Invited Talk, The Puzzles of the Galactic Centre, Heidelberg, Germany, September 2022.
- Gerhard, O.: Summary & topical discussions: Dynamics & Comparison with nearby galaxies. Invited Talk, The Puzzles of the Galactic Centre, Heidelberg, Germany, September 2022.
- Gerhard, O.: The Galactic Bar. Invited Talk, Ken Freeman @80: What is the Milky Way telling us about galaxy formation and evolution in general?, Perth, Australia, September 2022.
- Gerhard, O.: A new view of Galactic bar from abundance and age gradients. Invited Talk, Abundance gradients to trace galaxy formation and evolution, Sesto, Italy, March 2022.
- Gerhard, O.: Dynamics and Chemo-Dynamics of the Galactic Bar. Contributed Talk, Linking the Galactic and Extragalactic, Wollongong, Australia, November 2022.
- Gillessen, S.: 2021 Update: GRAVITY in the Galactic Center. Invited Talk, BlackHoleCam Plenary, Zoom, Germany, January 2022.
- Gillessen, S.: The mass distribution in the Galactic Center. Invited Talk, Intermediate Mass Black Holes: new science from stellar evolution to cosmology. San Juan, Puerto Rico, May 2022.
- Gillessen, S.: The mass distribution in the Galactic Center from interferometric astrometry of multiple stellar orbits. Invited Talk, Gemini Science User Meeting, Seoul, South Korea, July 2022.
- Gillessen, S.: R0. Invited Talk, 5 Years of GRAVITY, Schloss Ringberg, Germany, October 2022.
- Gillessen, S.: General relativistic effects around the Galactic Center black hole. Invited Talk, WE-Heraeus Seminar: The Variable Multi-Messenger Sky, Krakow, Poland, November 2022.
- Gillessen, S.: The Galactic Center Story. Invited Talk, Festive Colloquium on the Occasion of Reinhard Genzel, Schloss Ringberg, Germany, June 2022.
- Gillessen, S.: Einstein im Test – Das Schwarze Loch im Zentrum der Milchstraße. Public Talk, Karl Rahner Akademie, Köln, Germany, May 2022.
- Gillessen, S.: Kepler, Einstein und das Schwarze Loch im Zentrum der Milchstraße. Public Talk, Gedenkveranstaltung Johannes Kepler, Weil der Stadt, Germany, September 2022.
- Grant, S.: Probing the terrestrial planet-forming zone: Utilizing high spectral resolution, spatial resolution, and sensitivity. Contributed Talk, IR2022, Munich, Germany, February 2022.

Grant, S.: The Accretion Rate-Disk Mass Relationship for Herbig Ae/Be Stars. Colloquium, ESO Star and Planet Formation Seminar, Garching, Germany, May 2022.

Grant, S.: The Accretion Rate-Disk Mass Relationship for Herbig Ae/Be Stars. Colloquium, SMA Seminar, Cambridge, United States, May 2022.

Grant, S.: Probing the inner 10 AU of disks with infrared spectroscopy. Invited Talk, The Inner Regions of Protoplanetary Disks, Tegernsee, Germany, September 2022.

Grant, S.: Probing the inner 10 AU of disks with infrared spectroscopy. Invited Talk, Observing the Universe in Motion: 5 Years of GRAVITY, Tegernsee, Germany, October 2022.

Haberl, F.: X-ray binaries in the eROSITA all-sky surveys. Invited Talk, Annual Meeting of the German Astronomical Society 2022, Bremen, Germany, September 2022.

Haerendel, G.: Efforts to create and save the Cluster Mission. Invited Talk, Cluster 22nd Anniversary Symposium, Darmstadt, Germany, November 2022.

Herrmann, T.: Public Outreach Activities of the Max Planck Institute for Extraterrestrial Physics. Invited Talk, SHARING AHEAD 2022, Rome, Italy, November 2022.

Herrmann, Maximilian: Mitigation of bandwidth limitation induced crosstalk on Athena's WFI. Contributed Talk, SPIE Space Telescopes and Instrumentation: Ultraviolet to Gamma Ray, Montréal, Canada, July 2022.

Hsieh, T.H.H.: Temperature and Kinematic structure of the burst-phase protobinary SVS13A using CH₃CN and DCN. Invited Talk, COSPAR, Athens, Greece, July 2022.

Igo, Z.: An X-ray and Radio View of the Different Modes of AGN Accretion and Feedback with eROSITA and LOFAR. Contributed Talk, BLACK HOLE ACCRETION UNDER THE X-RAY MICROSCOPE, Madrid, Spain, June 2022.

Igo, Z.: An X-ray and Radio View of the Different Modes of AGN Accretion and Feedback with eROSITA and LOFAR. Contributed Talk, EAS 2022, Valencia, Spain, June 22.

Igo, Z.: An X-ray and Radio View of the Different Modes of AGN Accretion and Feedback with eROSITA and LOFAR. Contributed Talk, What Drives the Growth of Black Holes?, Reykjavik, Iceland, September 2022.

Ivlev, A.: Non-reciprocity in quasi-two-dimensional complex plasmas. Invited Talk, APS March Meeting 2022, Chicago, USA, March 2022.

Ivlev, A.: Radiolysis and sputtering of CO ice by cosmic rays: Experimental insights into the underlying mechanisms. Contributed Talk, From Clouds to Planets II: The Astrochemical Link, Berlin, Germany, October 2022.

Kravchenko, K.: Tomography of evolved star atmospheres. Colloquium, Hypatia Colloquium: Early Career Astronomer series at ESO, Garching, Germany, May 2022.

Laas, J.: 4MOST Commissioning Software: Front-End. Invited Talk, 4MOST All Hands Meeting 2022, Potsdam, Germany, September 2022.

Laas, J.: 4MOST Operation Rehearsals: OpR3-ESO_1b &

OpR3-Slow. Invited Talk, 4MOST All Hands Meeting 2022, Potsdam, Germany, September 2022.

Lattanzi, V.: Laboratory spectroscopy of sulphur bearing species. Invited Talk, GEMS Collaboration Meeting, Madrid, Spain, June 2022.

Lattanzi, V.: Laboratory spectroscopy of sulphur bearing species. Invited Talk, III Chilean Astrochemistry School, Santiago, Chile, December 2022.

Liu, D.: Millimeter spectroscopy of the most massive/dusty galaxies in the first ~0.9-1.8 Gyr of the young universe. Contributed Talk, COSMOS Team Meeting 2022, Paris, France, July 2022.

Liu, D.: CO and CI tracing gas compression/shocks and stellar feedback and their analytical conversion factors. Invited Talk, Theory Meets Observations 2022: Star Formation Physics Probed in Nearby Galaxies, Heidelberg, Germany, December 2022.

Liu, D.: Overview: From Milky Way to High-Redshift Galaxies and evolution of galaxy star formation, cold molecular gas, and dark matter fraction. Invited Talk, 14th IMPRS Symposium, Garching, Germany, December 2022.

Liu, Z.: Deciphering the extreme X-ray variability of an eROSITA discovered nuclear transient. Contributed Talk, Black Hole accretion under the X-ray microscope, Madrid, Spain, June 2022.

Liu, Z.: Deciphering the extreme X-ray variability of an eROSITA discovered nuclear transient. Contributed Talk, EUROPEAN ASTRONOMICAL SOCIETY ANNUAL MEETING 2022, Valencia, Spain, June 2022.

Liu, Z.: Tidal Disruption Events detected by eROSITA. Contributed Talk, Annual Meeting of the Astronomische Gesellschaft, Bremen, Germany, September 2022.

Liu, A.: Studying galaxy clusters with eROSITA. Invited Talk, Annual Meeting of the Astronomische Gesellschaft 2022, Bremen, Germany, September 2022.

Liu, A.: New results on galaxy clusters from eROSITA observations: From eFEDS to eRASS. Invited Talk, 1st Mondragone Frontiers of Astronomy Series, Rome, Italy, May 2022.

Locatelli, N.: The Milky Way hot circumgalactic medium as seen by eROSITA. Contributed Talk, Annual Meeting of the German Astronomical Society, Bremen, Germany, September 2022.

Mang, M.: Deep images of the Galactic Center with GRAVITY. Contributed Talk, SPIE Astronomical Telescopes + Instrumentation, 2022, Montréal, Québec, Canada, Montréal, Canada, July 2022.

Mayer, M.: Tracing the kinematics of central compact objects in the context of their parent supernova remnants. Contributed Talk, EAS Meeting 2022, Valencia, Spain, June 2022.

Mayer, M.: Characterizing thermal and nonthermal X-ray emission in the Vela supernova remnant with SRG/eROSITA. Contributed Talk, AG Meeting 2022, Bremen, Germany, September 2022.

- Merloni, A.: eROSITA Mission Status. Invited Talk, 5th CAS-ESA-MPE Einstein Probe workshop (remote), München, Germany, January 2022.
- Merloni, A.: eROSITA on SRG: Mapping the Hot and Energetic Universe. Colloquium, AEI Potsdam Colloquium, München, Germany, February 2022.
- Merloni, A.: eROSITA on SRG: Mapping the Hot Universe. Invited Talk, AAS HEAD Meeting (remote), München, Germany, March 2022.
- Merloni, A.: eROSITA on SRG: Mapping the Hot Universe. Colloquium, Heidelberg Joint Astronomical Colloquium, Heidelberg, Germany, May 2022.
- Merloni, A.: First results and highlights from eROSITA. Invited Talk, X-ray Astronomy Research in China (remote), München, Germany, June 2022.
- Merloni, A.: The eROSITA all-sky X-ray survey. Invited Talk, EAS Session: 'The universe in multi-color: synergies between J-PAS and other wide area surveys', Valencia, Spain, July 2022.
- Merloni, A.: Early Results from eROSITA. Invited Talk, From the Dolomites to the event horizon: sledging down the black hole potential well, Sexten, Italy, July 2022.
- Merloni, A.: Early results from eROSITA on SRG. Invited Talk, COSPAR Session: 'Spectral/Timing/Polarimetry Properties of AGN: Theory and Observations of the Inner Workings in these Objects', München, Germany, July 2022.
- Merloni, A.: The eROSITA all-sky X-ray survey. Invited Talk, LSST@Europe4, Rome, Italy, October 2022.
- Merloni, A.: Highlights from eROSITA on SRG and prospects of wide X-ray surveys in the 2030s. Invited Talk, Exploring the Hot and Energetic Universe: the third scientific conference dedicated to the Athena X-ray Observatory, Barcelona, Spain, November 2022.
- Merloni, A.: eROSITA on SRG: Mapping the Hot Universe. Colloquium, Hellenic Astronomical Society (remote), München, Germany, December 2022.
- Merloni, A.: Early results from eROSITA (all-sky) X-ray surveys. Invited Talk, XVIII JPAS Meeting (remote), München, Germany, December 2022.
- Müller, T.: No one gets closer to the Sun: Thermophysical properties of Atira object 2021 PH27. Contributed Talk, European Planetary Science Congress (EPSC) 2022, Granada, Spain, September 2022.
- Müller, T.: Mission-target asteroids: thermal-IR characterization from ground. Contributed Talk, An Infrared Bright Future for Ground-based IR Observatories in the Era of JWST (IR2022), Online, Japan, February 2022.
- Müller, T.: Experimente auf/an Asteroiden: Landung, Probenentnahme, Abwehr, Forschung. Public Talk, Volkshochschule München Nord, Wissenschaftliche Vortragsreihe, Ismaning, Germany, November 2022.
- Müller, T.: Ergebnisse aktueller Asteroidenmissionen: Erforschung und Abwehr. Public Talk, Astronomiemuseum Sternwarte Sonneberg, Wissenschaftliche Vortragsreihe, Sonneberg, Germany, November 2022.
- Müller, T.: DARTxDidymoon – Asteroiden: Erforschung und Abwehr. Public Talk, Volkssternwarte München, Wissenschaftliche Vortragsreihe, München, Germany, September 2022.
- Müller, T.: Satellitenmissionen zu Asteroiden: Von der Erforschung zur Asteroidenabwehr. Public Talk, Volkshochschule München Nord, Wissenschaftliche Vortragsreihe, Garching, Germany, April 2022.
- Müller-Seidlitz, J.: Athena WFI. Invited Talk, MPG HLL: Technology and Project Review, Kreuth, Germany, December 2022.
- Paschmann, G.: Results of the Electron Drift Instrument on Cluster. Invited Talk, Cluster 22nd Anniversary Symposium, Darmstadt, Germany, November 2022.
- Pezzotta, A.: KP1: Real-space galaxy power spectrum. Contributed Talk, Euclid galaxy clustering joint WP:NL/WP:HOS meeting, Trieste, Italy, November 2022.
- Pezzotta, A.: COMET: a fast and accurate emulator for 2pt clustering statistics. Contributed Talk, DESI collaboration meeting, Cancún, Mexico, December 2022.
- Pezzotta, A.: Evolution Mapping: understanding the information content of anisotropic clustering measurements. Contributed Talk, Mini Ringberg, Garching bei München, Germany, May 2022.
- Pineda, J. E.: Using Interferometry to Test Our Star-Formation Paradigm. Colloquium, Joint ALMA Observatory (JAO) Colloquium, Santiago, Chile, April 2022.
- Pineda, J.E.: Using Interferometry to Test Our Star-Formation Paradigm. Colloquium, Radio Division seminar, Cambridge, MA, USA, May 2022.
- Predehl, P.: The X-ray Telescope eROSITA on SRG. Invited Talk, SPIE Astronomical Telescopes + Instrumentation 2022, Montreal, Canada, July 2022.
- Predehl, P.: The X-ray Telescope eROSITA on SRG. Invited Talk, Conference in Celebration of Remo Ruffini's 80th Birthday, Nice, France, May 2022.
- Price, S. H.: Galaxy structures through cosmic time. Colloquium, Penn State University, Department of Astronomy and Astrophysics, Pittsburgh, U.S.A., October 2022.
- Price, S. H.: Deep resolved studies of galaxy kinematics and structures at the peak of cosmic star formation. Invited Talk, Conference "In Situ View of Galaxy Formation 2", Ringberg, Germany, July 2022.
- Price, S. H.: Constraining the lead-up to quenching: resulting structures, dynamics, feedback, and mass transport of massive SFGs at $z \sim 1-3$. Contributed Talk, Conference "Epoch of Galaxy Quenching 2022", Cambridge, U.K., September 2022.
- Pulsoni, Claudia: Compact progenitors in simulated ETG cores. Invited Talk, COSMIC NUGGETS – A FEAST OF COMPACT AND MASSIVE GALAXIES ACROSS THE UNIVERSE, Sesto, Italy, March 2022.

Pulsoni, C.: The stellar halos of ETGs in the IllustrisTNG simulations. Invited Talk, VEGAS Collaboration meeting, Napoli, Italy, July 2022.

Pulsoni, C.: The stellar halos of ETGs in the IllustrisTNG simulations. Contributed Talk, In Situ View of Galaxy Formation 2, Ringberg, Germany, July 2022.

Rab, Ch.: Observing the gas disk around the young planet-mass companion CT Cha b with JWST and ALMA. Contributed Talk, COSPAR 2022, Athens, Greece, July 2022.

Rab, Ch.: Constraining Coronal Mass Ejection and the Stellar Energetic Particle Fluxes from Young Stars During the Period of Planet Formation. Contributed Talk, COSPAR 2022, Athens, Greece, July 2022.

Rab, Ch.: Constraining the stellar energetic particle flux of T Tauri stars. Contributed Talk, Cosmic Rays II, Florence, Italy, November 2022.

Rab, Ch.: Protoplanetary/planet-forming disks - The power of spectral line observations. Invited Talk, Ernst Dorfi Summer School, Vienna, Austria, September 2022.

Ramos-Ceja, M.: Mapping large scale structures at high energies with SRG/eROSITA. Colloquium, Physics colloquium at University of Hull, Online, UK, February 2022.

Ramos-Ceja, M.: Mapeo de estructuras a gran escala en altas energías con SRG/eROSITA (Spanish). Colloquium, Coloquio de Investigación del Instituto de Astronomía-UNAM, Online, Mexico, March 2022.

Ramos-Ceja, M.: X-ray properties of HSC weak lensing peaks in the eFEDS footprint. Contributed Talk, Galaxy Clusters 2022: Challenging Our Cosmological Perspectives, Online, U.S.A., April 2022.

Ramos-Ceja, M.: High-redshift galaxy groups as seen by ATHENA/WFI. Contributed Talk, The Physical Properties of the Groups of Galaxies, Bertinoro, Italy, July 2022.

Ramos-Ceja, M.: Mapeo de estructuras a gran escala en altas energías con SRG/eROSITA (Spanish). Colloquium, Coloquio Marcos Moshinsky, Leon, Mexico, November 2022.

Ramos-Ceja, M.: El Universo visto en rayos X. Public Talk, Tecnológico Superior de Apatzingan, Apatzingan, Mexico, November 2022.

Rau, A.: Transients associated to nuclei of galaxies not showing recent activity (as far as we have observational evidence). Contributed Talk, eROSITA_DE Consortium Meeting, remote, remote, January 2022.

Rau, A.: WFI Science Team. Contributed Talk, Athena/WFI Consortium Meeting, remote, remote, May 2022.

Rau, A.: WFI Update. Contributed Talk, Athena/WX-IFU Consortium Meeting, remote, remote, November 2022.

Rau, A.: WFI Science Team. Contributed Talk, Athena/WX-IFU Consortium Meeting #15, Garching, Germany, October 2022.

Redaelli, E.: The hunt for high-mass prestellar cores. Contributed Talk, MAYA: Meeting of ALMA Young Astronomers, Online, Germany, March 2022.

Redaelli, E.: The cosmic-ray ionisation rate in the pre-stellar core L1544. Contributed Talk, Cosmic Rays 2, Florence, Italy, November 2022.

Redaelli, E.: The hunt for high-mass prestellar cores. Contributed Talk, EAS - European Astronomical Society Meeting, Valencia, Spain, June 2022.

Redaelli, E.: Molecules as probes of the star-formation process. Colloquium, Santiago de Chile, Chile, October 2022.

Redaelli, E.: Molecules as probes of the star-formation process. Colloquium, Santiago de Chile, Chile, October 2022.

Redaelli, E.: Molecules as probes of the star-formation process. Colloquium, Concepción, Chile, September 2022.

Rukdee, S.: Unveiling Oxygen on Earth-like planets with a Fabry Perot based Instrument. Contributed Talk, Thinkshop 2022: High-resolution spectroscopy for exoplanet atmospheres and biomarkers, Potsdam, Germany, September 2022.

Rukdee, S.: Calibration of Einstein Probe FXT - QM and FM at the PANTER X-ray test facility. Contributed Talk, International Conference on Space Optics, Dubrovnik, Croatia, October 2022.

Rukdee, S.: The X-ray testing of Einstein Probe WXT Qualification Model at PANTER. Contributed Talk, International Conference on Space Optics, Dubrovnik, Croatia, October 2022.

Salvato, M.: The first x00k AGN detected by eROSITA. Contributed Talk, COSPAR 2022, Athens, Greece, July 2022.

Salvato, M.: Identifying correct counterparts to high-energy sources by "multiwavelength educated guesses" imbibed in Bayesian statistic environment. Invited Talk, PHYSTAT-Gamma, Virtual, Virtual, September 2022.

Salvato, M.: ML applied to Identification/characterisation of X-ray sources and open problems. Invited Talk, Machine Learning at GGI (Galileo, Galilei Institute), Florence, Italy, September 2022.

Salvato, M.: Active Galactic Nuclei as seen from the 7 X-ray eyes of eROSITA. Colloquium, Instituto de Astrofísica de Andalucía (IAA) in Granada, Granada, Spain, January 2022.

Salvato, M.: eROSITA and its contribution to AGN studies. Colloquium, University of Illinois, Illinois, (USA), February 2022.

Salvato, M.: MPE photometric redshifts for LSST detected AGN. Invited Talk, LSST-AGN meeting, Virtual, Virtual, July 2022.

Salvato, M.: eROSITA insights on the hot and energetic Universe. Invited Talk, AG 2022, Bremen, Germany, September 2022.

Salvato, M.: Research in everyday life. Public Talk, Elementary School In Carpanedo (Padova), Padova, Italy, May 2022.

- Salvato, M.: eROSITA insights on the hot and energetic Universe and Synergies with Euclid. Invited Talk, ESA-ESO Euclid workshop on Galaxy evolution, Madrid, Spain, October 2022.
- Sanders, J.: Tools for the analysis of X-ray extended X-ray sources. Invited Talk, AHEAD 2020: Tools for advanced High-Energy Astrophysics data analysis, Online, February 2022.
- Sanders, J.: eRODat: eROSITA-DE DR1 Data Archive Website. Invited Talk, German eROSITA Consortium meeting, Bamberg, Germany, February 2022.
- Semenaite, A: Assessing consistency in physical parameter space with the full shape of anisotropic clustering measurement. Invited Talk, CosmoVerse seminar, online, November 2022.
- Semenaite, A: Cosmological implications of the full shape of anisotropic clustering measurements in BOSS and eBOSS. Invited Talk, ETH Zurich, CosmoClub, Zurich, Switzerland, November 2022.
- Semenaite, A: Constraining beyond- Λ CDM models with full shape clustering analysis of BOSS and eBOSS. Invited Talk, ICE-CSIC Journal Club, online, November 2022.
- Semenaite, A: Constraining beyond- Λ CDM models with full shape clustering analysis of BOSS and eBOSS. Contributed Talk, Essential Cosmology for the Next Generation, Playa del Carmen, Mexico, December 2022.
- Semenaite, A: Constraining beyond- Λ CDM models with full shape clustering analysis of BOSS and eBOSS. Contributed Talk, Dark Energy Connector Day, Garching bei München, Germany, November 2022.
- Semenaite, A: Cosmological implications of the full shape of anisotropic clustering measurements in BOSS and eBOSS. Contributed Talk, Cosmology from Home, online, July 2022.
- Semenaite, A: Cosmological implications of the full shape of anisotropic clustering measurements in BOSS and eBOSS. Contributed Talk, Rencontres de Moriond, La Thuile, Italy, January 2022.
- Seppi, R.: Detecting clusters and AGN in an eROSITA all-sky survey digital twin. Contributed Talk, MIAPbP Advances in Cosmology through Numerical Simulations, Garching, Germany, May 2022.
- Seppi, R.: Detecting clusters and AGN in an eROSITA all-sky survey digital twin. Contributed Talk, Astronomische Gesellschaft Bremen, Bremen, Germany, September 2022.
- Shangguan, J.: Spatially resolving the inner parsec of AGN with VLTI/GRAVITY. Contributed Talk, Sharpest Eyes on the Sky 2022, Exeter, United Kingdom, April 2022.
- Shangguan, J.: Spatially resolving the inner parsec of AGN with VLTI/GRAVITY. Contributed Talk, EAS 2022, session SS12c: The inner parsec of AGN: accretion, winds & clouds, Valencia, Spain, June 2022.
- Shangguan, J.: Near-infrared Interferometry Science with VLTI/GRAVITY. Colloquium, Kavli Institute for Astronomy and Astrophysics at Peking University, Beijing, China, November 2022.
- Shimizu, T.: Resolving the Sub-parsec Structure of AGN with VLTI/GRAVITY. Colloquium, IPAG/IRAM, Grenoble, France, March 2022.
- Shimizu, T.: Measuring the growth of supermassive black holes from $z=0-2$ with GRAVITY(+). Invited Talk, MPE Fachbeirat 2022, Munich, Germany, June 2022.
- Shimizu, T.: Imaging and Resolving the Central Parsec: A Revolution from NIR-MIR Interferometry. Invited Talk, Torus 2022 Workshop, Leiden, Netherlands, December 2022.
- Shimizu, T.: Measuring the growth of supermassive black holes from $z=0-2$ with GRAVITY(+). Invited Talk, Genzel @ 70, Schloss Rinberg, Germany, June 2022.
- Shimizu, T.: Resolving the BLR in AGN with GRAVITY/GRAVITY(+). Invited Talk, Observing the Universe in Motion: 5 Years of GRAVITY, Schloss Ringberg, Germany, October 2022.
- Shimizu, T.: Resolving the sub-pc structure of AGN with GRAVITY/GRAVITY+. Contributed Talk, Quasars and Galaxies through Cosmic Time, online, January 2022.
- Sipilä, O.: Revised Models for Cosmic Ray Induced Desorption in Dense Clouds. Invited Talk, Cosmic Rays 2: The Salt of the Star Formation Recipe, Florence, Italy, November 2022.
- Spezzano, S.: Nitrogen fractionation traces isotope selective photodissociation in a pre-stellar core. Contributed Talk, From Clouds to Planets II, Berlin, Germany, October 2022.
- Spezzano, S.: High-resolution molecular spectroscopy in the CAS Laboratories. Invited Talk, IAU General Assembly, Busan, South Korea, August 2022.
- Spezzano, S.: Nitrogen Fractionation traces isotope selective photodissociation in a pre-stellar core. Colloquium, EAS Annual Meeting, Valencia, Spain, July 2022.
- Spezzano, S.: Dissecting the Chemical and Physical Structure of pre-stellar cores. Colloquium, SFB Institute Colloquium, Cologne, Germany, May 2022.
- Spezzano, S.: Dissecting the Chemical and Physical Structure of pre-stellar cores. Colloquium, Institute Colloquium, Paris, France, November 2022.
- Stieglitz, V.: Characterisation of lobster eye optics and investigation of alternative PSF bases. Contributed Talk, International Workshop on Astronomical X-ray Optics, Prague, Czech Republic, June 2022.
- Sturm, E.: Supermassive black hole mass measurements from interferometric spectro-astrometry and reverberation mapping. Invited Talk, IAU General Assembly / Division D workshop, Busan, Republic of Korea, August 2022.
- Sturm, E.: MICADO. Invited Talk, Workshop in honor of Reinhard Genzel's 70th birthday, Ringberg Castle, Germany, June 2022.
- Sturm, E.: The Universe and I - Musings about the useful-

- ness of astronomy for humankind. Contributed Talk, IR group seminar, Garching, Germany, November 2022.
- Sánchez, A.: Evolution mapping: a new approach to describe non-linear matter clustering. Colloquium, Astronomical Observatory of Trieste, Trieste, Italy, January 2022.
- Sánchez, A.: Evolution mapping: a new approach to describe non-linear matter clustering. Colloquium, Università degli Studi di Milano, Milan, Italy, February 2022.
- Sánchez, A.: Construction of the cosmological covariance matrices for galaxy clustering 2pt statistics. Contributed Talk, Euclid Consortium meeting 2022, Oslo, Norway, April 2022.
- Sánchez, A.: Evolution mapping: a new approach to describe non-linear matter clustering. Contributed Talk, Advances in Cosmology through Numerical Simulations, Garching, Germany, May 2022.
- Sánchez, A.: Genuine precision cosmology from the large-scale structure of the Universe. Colloquium, Institute for Fundamental Physics of the Universe, Trieste, Italy, September 2022.
- Sánchez, A.: Genuine precision cosmology from the large-scale structure of the Universe. Colloquium, Astronomical Observatory of Cordoba, Cordoba, Argentina, December 2022.
- Tacconi, L. J.: The Evolution of the Star Forming Interstellar Medium Across Cosmic Time. Colloquium, Durham (remote), United Kingdom, March 2022.
- Tacconi, L. J.: The Evolution of Cold Gas across Cosmic Time: the PHIBSS Large Program and a Forward Look to NOEMA3D. Invited Talk, IRAM Conference on Multi-line Diagnostics of the ISM, Nice, France, April 2022.
- Tacconi, L. J.: The Evolution of the Cold, Star-forming ISM in Galaxies over Cosmic Time. Invited Talk, From Stars to Galaxies II, Gothenburg, Sweden, June 2022.
- Tacconi, L. J.: The Cosmic Evolution of Gas and Star Formation. Invited Talk, The Cosmic Evolution Ringberg Symposium in honor of Reinhard Genzel's 70th Birthday, Schloss Ringberg, Germany, June 2022.
- Tacconi, L. J.: The Evolution of the Cold, Star-forming ISM in Galaxies over Cosmic Time. Invited Talk, In Situ View of Galaxy Formation II, Schloss Ringberg, Germany, July 2022.
- Tacconi, L. J.: The Evolution of the Cold, Star-forming ISM in Galaxies over Cosmic Time. Invited Talk, Santa Cruz Hi-Pacc Galaxy Formation Workshop, Santa Cruz, California, USA, August 2022.
- Tacconi, L. J.: The Evolution of the Cold, Star-forming ISM in Galaxies. Invited Talk, Alvio@80 2022 conference in honor of Alvio Renzini, Chania (remote), Greece, September 2022.
- Tacconi, L. J.: Uniting European Astronomy. Invited Talk, ESO 60th Anniversary Celebration Day in the Netherlands, Leiden, The Netherlands, September 2022.
- Tacconi, L. J.: Watching Galaxies Grow. Public Talk, Bergamo Scienza, Bergamo (remote), Italy, October 2022.
- Tacconi, L. J.: The ELT Programme. Invited Talk, ESO 60th Anniversary Celebration Day in France, Paris, France, November 2022.
- Tacconi, L. J.: A (Sub)mm View of Galaxy Formation and Evolution. Invited Talk, WE-Heraeus JWST Symposium, Berlin, Germany, November 2022.
- Tacconi, L. J.: Exploring the Universe with ESO's Super Telescopes - Panel Discussion. Public Talk, Allison Leveck Lecture 2022, Sydney, Australia, December 2022.
- Valdivia Mena, Maria: Rivers in the sky: Streamers discovered towards two embedded protostars in Perseus. Contributed Talk, European Astronomical Society Annual Meeting 2022, Valencia, Spain, June 2022.
- Valdivia Mena, Maria: Rivers in the sky: streamers discovered towards two Class I sources in Perseus. Contributed Talk, From Clouds to Planets II: The Astrochemical Link, Berlin, Germany, August 2022.
- Valdivia Mena, Maria: Rivers in the sky: streamers discovered towards two Class I sources in Perseus. Colloquium, Star and Planet Formation Seminar, Garching, Germany, November 2022.
- Valdivia Mena, Maria: Rivers in the sky: streamers discovered towards two young embedded sources in Perseus. Colloquium, IRAM-Wisc-CAS Seminar, Virtual, Virtual, December 2022.
- Valdivia Mena, Maria: Rivers in the sky: streamers discovered towards two young embedded sources in Perseus. Colloquium, Tuesday UVa / NRAO Astronomy (TUNA) Lunch Talk, Charlottesville, USA, December 2022.
- Valdivia Mena, Maria: How to feed baby stars. Public Talk, Soapbox Science Munich, Munich, Germany, July 2022.
- Valdivia Mena, Maria: Rivers in the sky: streamers discovered towards two Class I sources in Perseus. Contributed Talk, Meeting of ALMA Young Astronomers, Virtual, Virtual, March 2022.
- Waddell, S.: Soft excesses as seen by eROSITA. Contributed Talk, Black hole accretion under the X-ray microscope, Madrid, Spain, June 2022.
- Waddell, S.: Soft excesses as seen by eROSITA. Contributed Talk, COSPAR 2022, Athens, Greece, July 2022.
- Werner, Werner: Neue Großteleskope für die Astrophysik. Public Talk, VHS Ottobrunn Studium Generale, Ottobrunn, Deutschland, March 2022.
- Werner, Werner: 2-eROSITA, ein deutsches Röntgenteleskop für die Erforschung des Universums. Public Talk, VHS Ottobrunn Studium Generale, Ottobrunn, Deutschland, March 2022.
- Widmann, F.: GRAVITY-Faint: reducing noise sources in GRAVITY+. Contributed Talk, SPIE Astronomical Telescopes & Instrumentation 2022, Montreal, Canada, July 2022.

- Widmann, F.: The Galactic Center with GRAVITY. Contributed Talk, Sharpest Eye in the Sky, Exeter, UK, April 2022.
- Wolf, J.: Finding high-redshift quasars with eROSITA. Invited Talk, COSPAR-22, Athens, Greece, July 2022.
- Wolf, J.: The detection of $z > 5.5$ quasars with eROSITA. Contributed Talk, EAS, Valencia, Spain, June 2022.
- Yeung, M: The Diffuse X-ray Foreground Revealed by the Darkest Shadows. Contributed Talk, Annual Meeting of the Astronomische Gesellschaft 2022, Bremen, Germany, September 2022.
- Zhang, Yi: Study the hot circum-galactic medium of galaxies with eRASS1 data. Contributed Talk, Multi-phase, Multi-temperature and Complex: how AGN feedback shapes the nature of the circum-galactic and halo gas in galaxy groups, Garching, Germany, December 2022.
- van Dishoeck, E.F.: Building stars, planets and the ingredients for life in space. Invited Talk, Niels Bohr Centennial Symposium, Copenhagen, Denmark, March 2022.
- van Dishoeck, E.F.: Building stars, planets and the ingredients for life in space. Colloquium, Alikhanian Yerevan Institute of Physics, Yerevan, Armenia, September 2022.
- van Dishoeck, E.F.: Building stars, planets and the ingredients for life in space. Public Talk, Science and Cocktails, Copenhagen, Denmark, October 2022.
- van Dishoeck, E.F.: Building stars, planets and the ingredients for life in space. Public Talk, Niels Bohr prize public lecture, Copenhagen, Denmark, October 2022.
- van Dishoeck, E.F.: Building stars, planets and the ingredients for life in space. Public Talk, Frederiksborg Gymnasium, Copenhagen, Denmark, October 2022.
- van Dishoeck, E.F.: Building stars, planets and the ingredients for life in space. Public Talk, Trinity College, Cambridge, UK, November 2022.
- van Dishoeck, E.F.: Building stars, planets and the ingredients for life in space. Invited Talk, Christmas lecture FWN, Leuven, Belgium, December 2022.
- van Dishoeck, E.F.: Building planets: what sets their composition?. Invited Talk, PEPSci exoplanet meeting (virtual), Leiden, Netherlands, February 2022.
- van Dishoeck, E.F.: Building planets: what sets their composition?. Invited Talk, EAS Fritz Zwicky Prize lecture, Valencia, Spain, June 2022.
- van Dishoeck, E.F.: Building planets: what sets their composition?. Colloquium, Institute of Astronomy LCLU seminar, Cambridge, UK, November 2022.
- van Dishoeck, E.F.: Zooming into the planet forming zones of disks. Colloquium, Astronomical Institute, Vienna, Austria, February 2022.
- van Dishoeck, E.F.: Astrochemical trail from clouds to disks and planets. Colloquium, University of Virginia/NRAO, Charlottesville, USA, May 2022.
- van Dishoeck, E.F.: Astrochemical trail from clouds to disks and planets. Colloquium, JEDI-INAF colloquium (virtual), Rome, Italy, June 2022.
- van Dishoeck, E.F.: Molecular processes between the stars. Invited Talk, MOLEC 2022, Hamburg, Germany, August 2022.
- van Dishoeck, E.F.: Molecular processes relevant for astrophysics: theoretical studies. Invited Talk, IAU Symposium 371, Busan, Republic of Korea, August 2022.
- van Dishoeck, E.F.: Tracing the journey of molecules in space with IRMMW-THz spectroscopy. Invited Talk, IRMMW-THz symposium, Delft, Netherlands, August 2022.
- van Dishoeck, E.F.: Where does Earth's water come from?. Public Talk, VISESS water forum, Vienna, Austria, March 2022.
- van Dishoeck, E.F.: Astrochemistry: from the biggest to the smallest scales. Invited Talk, Genzefest, Ringberg, Germany, July 2022.
- van Dishoeck, E.F.: The inner regions of protoplanetary disks. Invited Talk, Inside 2022 inner disks conference, Ringberg, Germany, September 2022.
- van Dishoeck, E.F.: First JWST results on disks from the MINDS program. Contributed Talk, Niels Bohr Gold medal Astrochemistry symposium, Copenhagen, Denmark, October 2022.
- van Dishoeck, E.F.: Probing the embedded phase of star formation with JWST spectroscopy. Invited Talk, IceAge meeting, Leiden, Netherlands, November 2022.
- van Dishoeck, E.F.: JWST: a new journey of discovery of the cosmos. Invited Talk, EIROFORUM meeting, Heidelberg, Germany, April 2022.
- van Dishoeck, E.F.: JWST: a new journey of discovery of the cosmos. Public Talk, CERN Beamline for Schools (virtual), Geneva, Switzerland, September 2022.
- van Dishoeck, E.F.: JWST: a new journey of discovery of the cosmos. Invited Talk, European Science Open Forum, Leiden, Netherlands, July 2022.
- van Dishoeck, E.F.: JWST: a new journey of discovery of the cosmos. Colloquium, Byurakan Observatory, Yerevan, Armenia, September 2022.
- van Dishoeck, E.F.: JWST: a new journey of discovery of the cosmos. Public Talk, Starmus Festival opening ceremony, Yerevan, Armenia, September 2022.
- van Dishoeck, E.F.: A rollercoaster triennium: some reflections. Invited Talk, IAU General Assembly opening ceremony, Busan, Republic of Korea, August 2022.
- van Dishoeck, E.F.: Women in astronomy and the IAU. Invited Talk, IAU GA WiA WG4 meeting, Busan, Republic of Korea, August 2022.
- van Dishoeck, E.F.: Synergies and challenges of ground and space astronomy. Invited Talk, IAU GA Global coordination WG meeting, Busan, R, August 2022.

von Fellenberg, S.: Young Stars in the Galactic Center. Colloquium, Hypatia Colloquium 2022, online, May 2022.

von Kienlin, A.: Fermi GBM - 14 years in operation. Contributed Talk, Tenth International Fermi Symposium, Johannesburg, South Africa, October 2022.

von Kienlin, A.: eROSITA on SRG. Contributed Talk, Tenth International Fermi Symposium, Johannesburg, South Africa, October 2022.

Dissertationen

Choudhury, S.: Structure and dynamics of low-mass star-forming cores. Ludwig Maximilian University, 2022.

Fahrenschon, V.: Stabilization of a high-resolution spectrograph and performance verification by measurements of the Rossiter-McLaughlin effect. LMU, 2022.

Müller, B.: Infrared spectroscopy of water-bearing interstellar ice analogues - from molecular oxygen to the structure of ice mantles. Ludwig Maximilian University of Munich, 2022.

de Nicola, S.: Intrinsic shapes of massive elliptical galaxies. MPE/LMU, 2022.

Masterarbeiten

Almanstoecker, P.: Investigation of the dark matter distribution in barred Milky Way-like galaxies in the Illustris TNG50 simulation. Univ. Augsburg, 2022.

Balzer, F.: Quasar selection for 4Hi-Q using photometric redshifts. University Hamburg, 2022.

Baron Perez, Nicolas: Mass Prediction of eROSITA Galaxy Clusters Using Machine Learning. MPE, LMU, 2022.

Gonzales, Justo: Stacking the Spectra of eROSITA Galaxy Cluster Data for Searches of the 3.5keV line: Dark Matter Decay or Charge Exchange?. MPE, LMU, 2022.

Grünwald, G.: Spectral Analysis of Narrow-Line Seyfert 1 Galaxies in the First eROSITA All-Sky Survey Scan. MPE, 2022.

Jouili, A.: Dark matter in dwarf elliptical galaxies. TU, 2022.

Lopez, N.: Robust Estimation of Host Stellar Masses for Active Galactic Nuclei. MPE, 2022.

Makarov, Sergei: Finding Superclusters in the eRASS1. MPE, LMU, 2022.

Mang, M.: Interferometrische Bildgebung und Mosaik des Galaktischen Zentrums mit GRAVITY / Interferometric Imaging and Mosaicing of the Galactic Center with GRAVITY. Max-Planck-Institut für extraterrestrische Physik, 2022.

Shankar, S.: Photometric redshift estimation for AGN detected by eROSITA. Tübingen University, 2022.

Bachelorarbeiten

Becher, D.: The formation and evolution of early-type galaxies - Age determination of early-type galaxies as a function of redshift. LMU, 2022.

Huber, M.: Evolution of Early-Type galaxies - The Fundamental Plane. LMU, 2022.

Rijal, S.: The radius gap - Why there are (almost) no planets with radii between 1.5-2 earth radii. LMU, 2022.

Sabovic, A.: Measurement of spin-orbit alignments with the help of planetary transits. LMU, 2022.

Stanka, S.: Transit time variations - A powerful method for the determination and characterization of exoplanet systems and their properties. LMU, 2022.

Thurner, S.: Evolution of spiral galaxies - The Tully-Fisher relation. LMU, 2022.

Kollaborationen / Wissenstransfer

Wissenschaftliche Kollaborationen nach Ländern



Belgien

Katholieke Universiteit Leuven, Leuven: GRAVITY+.
Department of Physics and Astronomy, Ghent University: EUCLID.

Brasilien

Instituto Federal de Educação, Ciência e Tecnologia do Rio de Janeiro, Nilópolis, Brazil: CAS-Laboratory.
IAG/Universidade de Sao Paulo: PFS.
Laboratório Nacional de Astrofísica: PFS.
Universidade Federal de Minas Gerais, Belo Horizonte: CAS-Observations.

Canada

University of Toronto, Toronto: CAS-Theory.
Department of Physics and Astronomy, University of Waterloo: EUCLID:

Chile

ESO, Joint ALMA Observatory, Santiago de Chile: CAS-Observations; SBNF.
NAQAF, Nucleo de astroquímica y astrofísica, Universidad Autónoma de Chile: CAS-Laboratory.
Universidad de Chile, Santiago de Chile: CAS-Observations.
Universidad de Concepcion: Max-Planck-Partnergruppe Baryonischer Zyklus in Galaxien; Röntgen-Doppelsternsysteme; CAS-Observations; Galaxienentwicklung.
Universidad Catolica Santiago, Santiago de Chile: Röntgen-Doppelsternsysteme; Max-Planck-Partnergruppe Galaktisches Zentrum.
Universidad Diego Portales, Santiago de Chile: CAS-Observations.

China

Donghua University, Shanghai: CAS-Theory
Institute for High-Energy Physics (IHEP), Peking: Gammaquellen mit COMPTEL und INTEGRAL; Einstein Probe; eXTP.
Nanjing University, Nanjing: CAS-Observations.
National Astronomical Observatories of China, Peking: PFS; CAS-Observations, CAS-Theory.
Kavli Institute for Astronomy and Astrophysics at Peking University, Peking: PFS.
Shanghai Jiao Tong University, Shanghai: PFS.
The University of Science and Technology of China, PFS.
Tsinghua University, Peking: PFS.
University of Hongkong, Hongkong: Strahlungsmechanismen von Pulsaren im Röntgen- und Gammabereich.
University of Science and Technology of China, Hefei: PFS.
Xiamen University, Xiamen: PFS.
Xinjiang Astronomical Observatory, Ürümqi: CAS-Theory:

Dänemark

Dänemarks Technische Universität, Lyngby: ATHENA.
Niels Bohr Institute, University of Copenhagen: CAS-Theory.
DTU Space, National Space Institute, Technical University of Denmark: EUCLID.

Deutschland

Astrophysikalisches Institut Potsdam, Potsdam: eROSITA; XMMNewton; OPTIMA; ARGOS; HETDEX; 4MOST.
Deutsches Elektronen-Synchrotron, Hamburg: CAS-Laboratory.
European Southern Observatory (ESO), Garching: GRAVITY; GRAVITY+; Galaxienentstehung; Nukleare Astrophysik; MICADO; ERIS; Black Hole Cam; Infrared Dark Clouds; CAS-Observations; CAS-Theory.

Fraunhofer Institut für Integrierte Schaltungen, Erlangen: Mikroelektronikentwicklungen; ATHENA. Fraunhofer Institut for Computer Graphics Research IGD, Darmstadt: IODE.

Heinrich-Heine-Universität, Düsseldorf: Soft Matter Physics.

Institut für Astronomie und Astrophysik Tübingen (IAAT), Tübingen: XMM-Newton; eROSITA; ATHENA; SBO-DS.

Institut für Astrophysik Göttingen, Göttingen: MICADO.

Institut für Festkörperphysik und Werkstoff-Forschung, Dresden: Entwicklung weichmagnetischer Werkstoffe.

Institut für Materialphysik im Weltraum, Köln: Glasübergänge.

Landessternwarte Heidelberg-Königstuhl, Heidelberg: Galaxienentstehung; ARGOS.

Laser Zentrum Hannover, Hannover: Dichroics for ARGOS.

Ludwig-Maximilians-Universität, München: MICADO; HETDEX; eROSITA; CAS-Theory.

Max-Planck-Institut für Astronomie, Heidelberg: GRAVITY; GRAVITY+; SDSS; ARGOS; MICADO; EUCLID; CAS-Theory.

Max-Planck-Institut für Astrophysik, Garching: SDSS; OPTIMA; eROSITA; PFS.

Max-Planck-Institut für Gravitationsphysik, Potsdam: Black Hole Cam.

Max-Planck-Institut für Physik, Werner Heisenberg Institut, München: MPG Halbleiterlabor; ATHENA. Max-Planck-Institut für Radioastronomie, Bonn: ARGOS; Black Hole Cam; CAS-Observations; CAS-Theory.

Physikalisch-Technische Bundesanstalt Berlin, Berlin: eROSITA.

Technische Universität Berlin, Berlin: Interstellares Medium.

Technische Universität Darmstadt, Darmstadt: CAST.

Technische Universität München, München: Nukleare Astrophysik; ESBO-DS.

Thüringer Landessternwarte Tautenburg, Tautenburg: GROND; Gamma-Ray Bursts.

Universität Bonn, Bonn: ATHENA; eROSITA; EUCLID; CAS-Observations.

Universität der Bundeswehr, München: SBNAF.

Universität Düsseldorf, Düsseldorf: ERC Advanced Grant; CAS-Theory.

Universität Erlangen (ECAP), Erlangen: eROSITA; ATHENA.

Universität Hamburg, Hamburg: eROSITA; OPTIMA (Flarestars).

Universität Heidelberg, Heidelberg: ATHENA; XFEL; CAS-Theory.

Universität Jena, Jena: Isolierte Neutronensterne; Nukleare Astrophysik.

Universität Kassel, Kassel: CAS-Observations, CAS-Laboratory.

Universität Köln, Köln: Galaktisches Zentrum; GRAVITY; GRAVITY+; CAS-Observations; CAS-Theory; CAS-Laboratory.

Universität Mannheim, Mannheim: ATHENA; XFEL.

Universität Stuttgart, Stuttgart: ESBO-DS.

Universität Würzburg, Würzburg: AGADE.

Finnland

University of Helsinki, Helsinki: CAS-Theory; CAS-Observations.

University of Turku - Finnish Centre for Astronomy with ESO (FINCA), Turku: MICADO.

University of Helsinki, Department of Physics: EUCLID.

Frankreich

Aix-Marseille University, Marseille: CAS-Theory.

CEA, Saclay: INTEGRAL-Spektrometer SPI; EUCLID; SVOM; ATHENA.

Centre d'Etude Spatiale des Rayonnements (UPS), Toulouse: INTEGRAL-Spektrometer SPI; CAS-Observations.

Centre National de la Recherche Scientifique, Paris: INODE.

European Space Agency (ESA), Paris: EUCLID

IAP, Paris: Nukleare Astrophysik.

Institut d'Astrophysique de Paris: EUCLID.

IPAG, Grenoble: GRAVITY; GRAVITY+; MICADO; CAS-Observations; CAS-Theory.

IRAM, Grenoble: CAS-Observations.

IRAM, Saint-Martin-d'Hères: CAS-Observations; Galaxienentstehung.

Laboratoire d'Astrophysique de Marseille (LAM), Marseille: EUCLID; Gamma-Ray Bursts; PFS; CAS-Observations.

Laboratoire Univers et Particules de Montpellier, Montpellier: Cosmic-ray propagation in molecular clouds.

Observatoire astronomique de Strasbourg, Strasbourg, ATHENA.

Observatoire de la Côte d'Azur Nice (OCA), Nizza: GRAVITY+.

Observatoire de Paris (GEPI), Paris: MICADO; GRAVITY.

Observatoire de Paris (LERMA), Paris: CAS-Theory.

Observatoire de Paris (LESIA), Paris: MICADO; GRAVITY.

Observatoire de Paris-Meudon, Paris: GRAVITY; GRAVITY+, Galaktisches Zentrum.

SOLEIL Synchrotron (AILES beamline), Saint-Aubin: CAS-Laboratory.

Université de Bordeaux, Bordeaux: CAS-Theory.

Université de Cergy-Pontoise, Cergy Pontoise Cedex: CAS-Observations.

Université de Franche-Comté (UTINAM), Besançon: MICADO.

Université de Lyon (CRAL), Lyon: GRAVITY+; CAS-Observations.

Université de Rennes, Rennes: CAS-Laboratory; CAS-Observations.

Université de Toulouse, Toulouse: CAS-Observations; CAS-Laboratory.

Université Paris Diderot, Paris: CAS-Observations.

Université Paris-Saclay, Saclay: CAS-Laboratory; CAS-Observations.

Griechenland

ATHENA RC, Research and Innovation Centre in Information, Communication and Knowledge Technologies, Athen: INODE.

Infili Technologies, Athen: INODE.

University of Crete and Foundation for Research and Technology Hellas (FORTH), Heraklion: Röntgendoppeltsternsysteme; OPTIMA Photometer; Röntgen-AGN.

National Observatory of Athens, Athen: ATHENA; eROSITA.

Großbritannien

JAstrophysics Research Group University of Surrey: EUCLID.

John Moores University, Liverpool: Himmelsdurchmusterung Galaxienhaufen; Infrared Dark Clouds; CAS-Observations.

Open University, Milton Keynes: Kataklysmische Variablen; Novae; ATHENA.

Queen Mary University of London, London, UK: CAS-Observations; CAS-Theory.

Rutherford Appleton Laboratory, Council for the Central Laboratory of the Research Councils, Swindon: SIS-Junctions.

SKA Organisation, Jodrell Bank Observatory, Macclesfield: CAS-Observations.

United Kingdom Astronomy Technology Centre (UKATC), Edinburgh: EUCLID; ERIS.

University of Cambridge, Cambridge: DES; CAS-Theory.

University College London, London: High Energy Pulsars; EUCLID; DES; CAS-Observations.

University of Edinburgh, Edinburgh: DES.

University of Leeds, Leeds: CAS-Theory.

University of Leicester, Leicester: XMM-Newton; ATHENA; Swift; EUCLID.

University of Nottingham, Nottingham: DES.

University of Portsmouth, Portsmouth: DES.

University of Sussex, Brighton: DES.

University of Southampton, Southampton: GRAVITY+; Magellanic Clouds.

Indien

Tata Institute of Fundamental Research, Mumbai: CAS-Observations.

Irak

University of AL-Muthanna, AL-Muthanna: CAS-Observations.

Irland

National University of Ireland, Galway: High Time Resolution Astronomy; CAS-Theory.

University College Dublin: Fermi/GBM.

Israel

School of Physics and Astronomy, Wise Observatory, Tel Aviv: Aktive Galaxien; Interstellares Medium; Galaxienentwicklung.

Italien

Free University of Bozen-Bolzano, Bozen: INODE.

IFCAI-CNR Palermo, Palermo: XMM-Newton Beobachtungen von Neutronensternen und Pulsaren.

INAF (Istituto Nazionale di Astrofisica), Rom: ATHENA; EUCLID.

INAF Arcetri, Florenz: ARGOS; LBT; ERIS; CAS-Observations; CAS-Theory.

INAF Padua, Padua: LBT; MICADO; ERIS.

INAF Roma, Rom: LBT; Nukleare Astrophysik; EUCLID.

INAF Teramo, Teramo: ERIS.

INAF Trieste, Triest: Gamma-Ray Bursts; Fermi/LAT.

INFN Frascati, Frascati: SIDDHARTA.

Osservatorio Astronomico di Brera, Brera: Himmelsdurchmusterung Galaxienhaufen.

Osservatorio Astrofisico di Catania, Catania: CAS-Theory; CAS-Laboratory.

Scuola Normale Superiore, Pisa: CAS-Observations.

Università degli Studi di Firenze, Florenz: CAS-Observations; CAS-Theory.

Università degli Studi di Milano, Mailand: CAS-Observations.

Università degli Studi di Torino, Turin: CAS-Observations.

Università di Bologna, Bologna: EUCLID; CAS-Theory; CAS-Laboratory; CAS-Observations.

Università di Perugia, Perugia: CAS-Observations.

Japan

Academia Sinica, Nangang: PFS.

Chiba University: EUCLID.

Department of Chemistry, Tokyo University of Science, Japan: CAS-Observations.

Department of Physics, Nihon University, Japan: CAS-Observations.

Department of Materials and Life Sciences, Sophia University, Japan: CAS-Observations.

Kavli Institute for the Physics and Mathematics of the Universe, Kashiwa: PFS.

Kobe University, Kobe: CAS-Theory.

National Astronomical Observatory of Japan, Mitaka/Tokio: CAS-Theory; CAS-Observations; Galaxienentwicklung; PFS.

Institute of Physical and Chemical Research, Saitama: CAS-Observations.

Japan Aerospace Exploration Agency, Sagami-hara, Kanagawa: SBNF.

The Institute of Physical and Chemical Research (RIKEN), Japan: CAS-Observations.

Tokio Institute of Technology (TITECH), Ookayama: ASCA/XMM-Newton Beobachtungen von AGN.

University of Osaka, Osaka: Astro-H.

University of Tokyo, Institutes for Advanced Study (UTIAS), Tokyo: PFS.

University of Tokyo, Tokyo: PFS; CAS-Observations.

Tohoku University, Sendai: Galaxienentwicklung.

Lettland

Ventspils University College, Ventspils: CAS-Theory.

Mexiko

Universidad Nacional Autonoma de México, Ensenada: CAS-Observations.

Niederlande

ESTEC, Noordwijk: XMM-Newton; INTEGRAL; EUCLID; ATHENA; eROSITA.

JIVE Dwingeloo, Dwingeloo: Black Hole Cam.

NOVA (Leiden, Groningen, ASTRON/Dwingeloo, Amsterdam): MICADO; ERIS.

Leiden University, Leiden: CAS-Observations; CAS-Theory; IR/Submm Spectroscopy; EUCLID.

Radboud University, Nijmegen: Black Hole Cam; CAS Laboratory.

SRON, Utrecht: Chandra-LETG.

University of Groningen, Kapteyn Institute, Groningen: Rekonstruktion der Dichteverteilung im Universum; EUCLID; Dynamical-Chemical Models; CAS-Theory; CAS-Observations.

Norwegen

Institute of Theoretical Astrophysics, University of Oslo: EUCLID.

Österreich

Institut für Ionenphysik und Angewandte Physik - Molekulare Systeme; Universität Innsbruck: CAS-Laboratory.

Institut für Weltraumforschung, Graz: ATHENA WFI.

Universität und TU Wien: MICADO; ATHENA.

Universität Innsbruck: MICADO.

Universität Linz: MICADO.

RICAM Linz: MICADO.

Institute für Astronomy, Universität Wien: EUCLID.

Polen

Nicolaus Copernicus University, Torun: Pulsars Astronomical Centers; ATHENA.

Space Research Center (CBK), Warschau: ATHENA WFI.

Astronomical Observatory Institute, Poznań: SBNAF.

University Zielona Gora: OPTIMA.

Portugal

CENTRA Lissabon und Porto, Lissabon: GRAVITY; GRAVITY+.

Observatorio Astronomico de Lisboa, Lissabon: ATHENA.

Universidade de Coimbra, Coimbra: Departamento de Engenharia Química: CAS-Laboratory.

Rumänien

Institute for Space Science: EUCLID.

Russland

Institute of Astronomy, Moskau: CAS-Theory.

Lebedev Institute of Physics, Moskau: CAS-Theory.

Prokhorov General Physics Institute, Moskau: CAS-Laboratory.

Space Research Institute (IKI) of the Russian Academy of Science, Moskau: eROSITA/Spektrum Röntgen-Gamma.

Skobeltsyn Institute of Nuclear Physics, Moskau: Nukleare Astrophysik; Gamma-Ray Bursts; AGADE. Ural Federal University, Jekaterinburg: CAS-Theory.

Schweden

Chalmers University of Technology, Onsala Space Observatory, Onsala: CAS-Observations.

University Lund/Observatory, Lund: OPTIMA.

Schweiz

CERN, Geneva: CAST.

ETH Zürich, Zürich: ERIS.

Observatoire de Genève Sauverny, Genf: ISDC/INTEGRAL; Nukleare Astrophysik; EUCLID.

Swiss Institute of Bioinformatics, Lausanne: INODE.

Universität Basel, Basel: Nukleare Astrophysik.

University of Geneva, Genf: ATHENA.

University of Zurich, Zürich: Infrared Dark Clouds.

Zürcher Hochschule für Angewandte Wissenschaften, Zürich: INODE.

Spanien

CCentro de Investigaciones Energeticas, Medioambientales y Tecnologicas, Madrid: DES.

Centro de Astrobiología (CSIC/INTA), Madrid: CAS-Laboratory.

ESAC, Madrid: XMM-Newton Science Operations Center; INTEGRAL Science Operations Center; Herschel; EUCLID; SBNAF.

Instituto de Astrofísica de Andalucía (IAA), Granada: SBNAF; ESBO-DS.

Institut d'Estudis Espacials de Catalunya: EUCLID.

Instituto de Astrofísica de Canarias, La Laguna: SBNAF; EUCLID.

Instituto de Ciencias del Espacio, Bellaterra: DES.

Instituto de Ciències de l'Espai, Cerdanyola del Vallès: CAS-Observations.

Institut de Física d'Altes Energies, Barcelona: DES; EUCLID.

Javalambre Physics of the Accelerating Universe Astrophysical Survey (J-PAS), Javalambre: eROSITA follow up.

SIRIS Academic SL, Barcelona: INODE.

Universitat Autònoma de Barcelona, Bellaterra: CAS-Observations.

Universidad de Valencia, Department de Astronomia, Valencia: INTEGRAL-Spektrometer SPI.

Universidad de Zaragoza, Zaragoza: CAST.

Observatorio Astronómico de Mallorca, Costitx: Novae; Kometen.

Observatorio Astronómico Nacional, Madrid: CAS-Observations.

South Korea

Seoul National University, Seoul: Hayabusa-2.

Taiwan

Academia Sinica Institute of Astronomy and Astrophysics (ASIAA), Taipei: CAS-Theory; CAS-Observations; PFS.

National Central University, Chungli; PanSTARRS.

Tschechien

Charles University, Prague: SBNAF; Hayabusa-2.

Dept. of Surface and Plasma Science, Faculty of Mathematics and Physics, Charles University, Prague: CAS-Laboratory.

Ungarn

Konkoly Observatory of the Hungarian Academy of Sciences, Budapest: SBNAF; CAS-Observations; CAS-Theory.

Institute for Nuclear Research (ATOMKI), Debrecen: CAS-Laboratory.

USA

Argonne National Laboratory, Lemont: DES.

Brookhaven National Laboratory, Upton: strahlenharte JFETelektronik; strahlenharte Detektoren.

Benedictine College, Atchison: CAS-Theory.

California Inst. of Technology, Pasadena: X-ray Survey; PFS.

CfA, Cambridge: ATHENA/WFI; XMM-Newton/Chandra Kalibration.

Clemson University, Clemson: Gamma-Ray Bursts; Nukleare Astrophysik.
 Columbia University: PFS.
 Department of Astronomy, The University of Texas at Austin, Austin: CAS-Observations.
 Department of Astronomy, University of Michigan: CAS-Observations.
 Fermilab, Batavia: DES.
 Green Bank Observatory, Green Bank: CAS-Observations.
 Harvard-Smithsonian Center for Astrophysics, Cambridge: CAS-Observations; CAS-Laboratory; CAS-Theory.
 Johns Hopkins University, Baltimore: PFS.
 Marshall Space Flight Center, Huntsville: Fermi Gamma-Ray Burst Monitor; XMM-Newton und Chandra, Beobachtungen von Neutronensternen, Pulsaren und Supernova-Überresten.
 MIT, Cambridge: ATHENA WFI.
 NASA/Ames Research Center, Mofett Field (CA): MHD Shocks; SBNAF.
 NASA/Goddard Space Flight Center, Greenbelt (MD): INTEGRAL-Spektrometer SPI; Swift.
 NASA/Jet Propulsion Laboratory, Pasadena: EUCLID; PFS; CAS-Observations.
 National Radio Astronomy Observatory, Charlottesville: CAS-Theory; CAS-Observations.
 National Radio Astronomy Observatory, Socorro, New Mexico: CAS-Observations.
 National Science Foundation, Arlington: CAS-Observations.
 NOAO, Tucson: DES.
 Ohio State University, Columbus: DES; LBT.
 Pacific Northwest National Laboratory (PNNL), Richland: CAST.
 Pennsylvania State University, State College: HETDEX; Swift; ATHENA, PFS.
 Princeton University, Princeton: PFS; CAS-Theory.
 Research Corporation, Tucson: LBT.
 San Jose State University, San Jose: MHD shocks.
 SLAC, Stanford: CAMP; DES; ATHENA.
 Smithsonian Astrophysical Observatory, Cambridge: Chandra-LETGS; Röntgendoppelsterne in M31; ATHENA.
 Space Telescope Science Institute, Baltimore: Galaxienentstehung; Turbulence; SBNAF.
 Stanford University, Stanford: DES; Fermi/LAT; Fermi/GBM.
 Texas A & M University, College Station: DES; SBNAF.
 Texas State University, San Marcos: HETDEX.
 University of Arizona, Tucson: Kosmische Strahlung; Planetenentstehung; LBT; ARGOS; CAS-Observations; CAS-Theory.
 University of California, Berkeley: MPG/UCB-Kollaboration; FAST; INTEGRAL-Spektrometer SPI; Superbubbles.
 University of California, Santa Cruz: DES.
 University of Chicago, Chicago: CAS-Observations; DES.
 University of Colorado, Boulder (Co): Superbubbles; CAS-Observations; Galaxienkerne.
 University of Connecticut: PFS.
 University of Florida, Gainesville: Infrared Dark Clouds.
 University of Hawaii, Honolulu, Hawaii: CAS-Theory.
 University of Illinois, Urbana-Champaign: DES; PFS.
 University of Massachusetts, Amherst: CAS-Observations; PFS.
 University of Michigan, Ann Arbor: DES.
 University of Mississippi: CAS-Laboratory.
 University of Nevada, Las Vegas: CAS-Observations.
 University of Pennsylvania, State College: DES.
 University of Pittsburgh, Pittsburgh: Galaxienentstehung; PFS.
 University of Texas, Austin: Galaxienentstehung; CAS-Theory.
 University of Texas Austin, McDonald Observatory: Hobby-Eberly-Telescope, HETDEX.
 University of Texas at El Paso, CAS-Observations: CAS-Theory.
 University of Texas, San Antonio: SBNAF.
 University of Toledo, Toledo: Galaxienentstehung; CAS-Observations.
 University of Virginia, Charlottesville: CAS-Theory; CAS-Observations.
 University of Wisconsin-Madison, Madison: CAS-Theory.
 Yale University, New Haven: CAS-Observations.

Multinationale Kollaborationen - Projekte

ARGOS - Laserleitstern für das LBT: Arcetri Observatory, Italy; AIP, LSW Heidelberg, MPIa, MPIfR, Germany; University of Arizona, USA.

ASPI - The International Wave Consortium: CNR-IFSI Frascati, Italy; LPCE/CNRS Orleans, France; Dept. of Automatic Control and Systems University of Sheffield, UK.

ATHENA - Advanced Telescope for High Energy Astrophysics: Dänemarks Technische Universität, Dänemark; Nikolaus Kopernikus Astronomical Center, Polen; Universität Wien, Österreich; IWF, Graz; INAF Italy, Italy; CEA Frankreich, Frankreich; University of Leicester, Open University, UK; Institut für Astronomie und Astrophysik Tübingen, Erlangen Centre for Astroparticle Physics (ECAP), Germany; ESA; NOA, Greece; Universität Geneva, Schweiz; Institute for Astrophysics, Portugal; Stanford University, USA.

BOSS - Baryon Oscillation Spectroscopic Survey: SDSSIV Collaboration.

Chandra: Marshall Space Flight Center Huntsville, Massachusetts Institute of Technology Cambridge, Smithsonian Astrophysical Observatory Cambridge, USA; Space Research Institute Utrecht, The Netherlands; Universität Hamburg, Germany.

COSMOS - Cosmological Evolution Survey: INAF-Osservatorio Astronomico di Bologna, INAF-Osservatorio Astronomico di Roma, INAF-Osservatorio Astrofisico di Arcetri, INAF/IASF-CNR, Sezione di Milano, IRA-INAf, Bologna, Dipartimento di Astronomia, Università Padova, Dipartimento di Fisica, Università degli Studi Roma Tre, Italy; Harvard-Smithsonian Centre for Astrophysics, Cambridge, Dept. of Physics, Carnegie Mellon University, Pittsburg, Institute for Astronomy, University of Hawaii, California Institute of Technology, Pasadena, Dept. of Astronomy, Yale University, USA; INTEGRAL Science Data Centre, Versoix, Switzerland; Laboratoire d'Astrophysique de Marseille, France.

DES - Dark Energy Survey: LMU München, Excellence Cluster Universe, Germany; The Fermi National Accelerator Laboratory (Fermilab), University of Chicago, NOAO, University of Michigan, University of Pennsylvania, University of Illinois at Urbana-Champaign, Ohio State University, Texas A&M University, University of California Santa Cruz, Stanford University, SLAC National Accelerator Laboratory, The Lawrence Berkeley National Laboratory, Argonne National Laboratory, USA; University College London, University of Cambridge, University of Edinburgh, University of Portsmouth, University of Sussex, University of Nottingham, UK; Observatorio Nacional, Centro Brasileiro das Pesquisas Físicas, Universidade Federal do Rio, Brasilien; Instituto de Ciencias dei Espacio, Institut de Física d'Altes Energies, Centro de Investigaciones Energeticas Medioambientales y Tecnológicas, Spain.

eBOSS - SDSS-IV Extended Baryon Oscillation Spectroscopic Survey: Carnegie Mellon University (CMU), University of Colorado Boulder, Harvard-Smithsonian Center

for Astrophysics Participation Group, Johns Hopkins University, Kavli Institute for the Physics and Mathematics of the Universe, New Mexico State University, New York University, The Ohio State University, Penn State University, University of Utah, University of Wisconsin, Yale University, USA; Max-Planck-Institut fuer Astrophysik (MPA Garching), Max-Planck-Institut für extraterrestrische Physik (MPE), Max-Planck-Institut für Astronomie (MPIA Heidelberg), Germany; National Astronomical Observatories of China, Shanghai Astronomical Observatory, China; United Kingdom Participation Group, University of Portsmouth, UK.

ERIS - Enhanced Resolution Imager and Spectrograph for the VLT: ESO, Germany; ETH Zürich, Switzerland; INAF Arcetri (with OAA, OATe and OAPd), Italy; UKATC Edinburgh, Scotland; NOVA Leiden, The Netherlands.

EinsteinProbe – Chinese Academy of Science, Institute of High Energy Physics, National Astronomical Observatories, China, ESA.

eROSITA - extended Roentgen Survey with an Imaging Telescope Array: AIP Potsdam, Universität Tübingen, Universität Bonn, Universität Erlangen, Universität Hamburg, Remeis-Sternwarte Bamberg, MPA Garching, LMU (USM) München, Germany; IKI Moskau, Russia.

ESBO-DS - European Stratospheric Balloon Observatory – Design Study, EU H2020 project; University of Stuttgart, University of Tübingen, Germany; Swedish Space Corporation, Sweden; Instituto de Astrofísica de Andalucía, Spain.

EUCLID - ESA Mission to map the Dark Energy: ESA; Institut d'Astrophysique de Paris, France; Institute fur Astronomy, Universität Wien, Austria; Department of Physics and Astronomy, Ghent University, Belgium; Department of Physics and Astronomy, University of Waterloo, Canada; DTU Space, National Space Institute, Technical University of Denmark, Denmark; University of Helsinki, Department of Physics, Finland; Laboratoire d'Astrophysique de Marseille, Technopole de Marseille-Etoile, France; CEA/DSM/Irfu/Service d'Astrophysique, CE Saclay, France; Max-Planck-Institute for Extraterrestrial Physics, Germany; Max Planck Institute for Astronomy, Germany; Dipartimento di Fisica e Astronomia, Università di Bologna, Italy; INAF-Osservatorio di Roma, Italy; Chiba University, Japan; Leiden Observatory, Universiteit Leiden, Netherlands; Institute of Theoretical Astrophysics, University of Oslo, Norway; Departamento de Física da Faculdade de Ciências da Universidade de Lisboa, Portugal; Institut d'Estudis Espacials de Catalunya, Spain; Instituto de Astrofísica de Canarias, Spain; Institute for Space Science, Romania; Physique Théorique, Université de Genève, Switzerland; Physics Department, Lancaster University, UK; Astrophysics Research Group, University of Surrey, UK; NASA Jet Propulsion Laboratory, USA.

Fermi/GBM - Fermi Gamma-Ray Burst Monitor: Marshall Space Flight Center Huntsville, University of Huntsville, USA.

Fermi/LAT - Fermi Gamma-Ray Large Area Space Telescope: Stanford University Palo Alto, Naval Research Laboratory Washington DC, Sonoma State University Rohnert Park, Lockheed Martin Corporation Palo Alto, University of California Santa Cruz, University of Chicago, University of Maryland Greenbelt, NASA Ames Research Center Moffett Field, NASA Goddard Space Flight Center for High Energy Astrophysics Greenbelt, Boston University, University of Utah Salt Lake City, University of Washington Seattle, SLAC Particle Astrophysics Group Palo Alto, USA; ICTP and INFN Trieste, Istituto Nazionale di Fisica Nucleare Trieste, Italy; University of Tokyo, Japan; CEA Saclay, France.

GRAVITY - Instrument for VLT Interferometry: MPIA Heidelberg, Universität Köln, ESO Garching, Germany; CENTRA Lisbon and Porto, Portugal; IPAG Grenoble, Observatoire de Paris / Meudon (LESIA), France.

GRAVITY+ - VLT Interferometry upgrade project: MPIA Heidelberg, Universität Köln, ESO Garching, Germany; CENTRA Lisbon and Porto, Portugal; IPAG Grenoble, Observatoire de Paris / Meudon (LESIA), OCA Nice, CRAL Lyon, France; University of Southampton, UK; KU Leuven, Belgium.

HETDEX - Hobby-Eberly Telescope Dark Energy Experiment: University of Texas, Austin, Pennsylvania State University, Texas A&M University, USA; AIP Potsdam, LMU, USM, Germany.

INODE - Intelligent Open Data Exploration: Zürcher Hochschule für Angewandte Wissenschaften, ATHENA RC, Research and Innovation Center in Information, Communication and Knowledge Technologies, Fraunhofer Institute for Computer Graphics Research IGD, Infil Technologies Private Company, Center National de la Recherche Scientifique, SIRIS Academic SL, Swiss Institute of Bioinformatics, Free University of Bozen-Bolzano.

INTAS - Cooperation of Western and Eastern European Scientists: France, Germany, Norway, Russia.

ISDC - INTEGRAL Science Data Centre: Observatoire de Geneva Sauverny, Switzerland; Service d'Astrophysique Centre d'Etudes de Saclay, France; Rutherford Appleton Laboratory Oxon Dept. of Physics University Southampton, UK; Institut für Astronomie und Astrophysik Tübingen Germany; Danish Space Research Institute Lyngby, Denmark; University College Dublin, Ireland; Istituto di Fisica Milano, Istituto di Astrofisica Spaziale Frascati, Italy; N. Copernicus Astronomical Center Warsaw, Poland; Space Research Institute of the Russian Academy of Sciences Moscow, Russia; Laboratory for High Energy Astrophysics GSFC Greenbelt, USA.

INTEGRAL-Spectrometer SPI: Centre d'Etude Spatiale des Rayonnements (CESR) Toulouse, CEA Saclay Gif-sur-Yvette, France; University de Valencia Burjassot, Spain.

LBT - Large Binocular Telescope Project: MPIA Heidelberg, MPIfR Bonn, Landessternwarte Heidelberg Königstuhl, AIP, Germany; University of Arizona, Tucson, Ohio State University, Columbus, Research Corporation, USA; INAF, Italy.

MICADO - Multi-Adaptive Optics Imaging Camera for Deep Observations: ESO, LMU (USM), MPIA Heidelberg,

IAG Göttingen, Germany; INAF-OAPD Padova, INAF-OAR Roma, Italy; A* (an Austrian partnership comprising the University of Vienna, the University of Innsbruck, the University of Graz, and the University of Linz [with RICAM Linz]); specific contributions to MICADO come from Vienna/Innsbruck/Linz, Austria; NOVA (a federation several astronomical institutes; specific contributions to MICADO come from the University of Groningen, the University of Leiden, and the NOVA optical/infrared instrumentation group based at ASTRON in Dwingeloo), The Netherlands; CNRS/INSU (representing LESIA and GEPI, Paris, IPAG, Grenoble and UTINAM, Besançon), France; FINCA (University of Turku) Turku, Finland.

MXT - Microchannel X-Ray Telescope for Gamma-Ray Bursts: CEA, Saclay, France; University of Leicester, UK.

OPTIMA: AIP, MPI für Astrophysik, Universität Hamburg, Germany; University of Crete, Greece; University Zielona Gora, Poland; University Lund/Observatory, Schweden.

PFS - The Subaru Prime Focus Spectrograph Collaboration: Kavli Institute for the Physics and Mathematics of the Universe, Japan; The University of Tokyo Institutes for Advanced Study (UTIAS), University of Tokyo, Japan; National Astronomical Observatory of Japan; Academia Sinica, Institute of Astronomy and Astrophysics, Taiwan; California Institute of Technology, USA; NASA Jet Propulsion Laboratory, USA; Laboratoire d'Astrophysique de Marseille, France; Princeton University, USA; Johns Hopkins University, USA; IAG/Universidade de Sao Paulo, Brazil; Laboratório Nacional de Astrofísica, Brazil; Max-Planck-Institut für Astrophysik, Garching; Shanghai Jiao Tong University, China; National Astronomical Observatories of China; Tsinghua University, China; The University of Science and Technology of China; Xiamen University, China; Peking University, China; Columbia University, USA; Tufts University, USA; University of Connecticut, USA; University of Illinois at Urbana-Champaign, USA; University of Pittsburgh, USA; University of Massachusetts Amherst, USA; Pennsylvania State University, USA.

SBNAF - Small Bodies Near and Far, EU H2020 project; Poznań, Poland; Instituto de Astrofísica de Andalucía, Granada, Instituto de Astrofísica de Canarias (IAC), Spain; Konkoly Observatory, Budapest, Hungary; Institute of Space and Astronautical Science (ISAS, JAXA), Kanagawa, Japan.

SDSS - Sloan Digital Sky Survey: MPA Garching, MPIA Heidelberg, Germany; Univ. of Washington, Seattle, Fermi National Accelerator Laboratory, Batavia, University of Michigan, Ann Arbor, Carnegie Mellon University, Pittsburgh, Penn State University, University Park, Princeton University Observatory, Princeton, Institute of Advanced Study Princeton, Space Telescope Science Institute, Baltimore, Johns Hopkins Univ. Baltimore, USA.

Swift - Gamma-Ray Burst Mission: NASA/GSFC Greenbelt, Penn State University, USA; University of Leicester, Mullard Space Science Laboratory London, UK; Osservatorio Astronomico Brera, Italy.

XMM-Newton/SSC (Survey Science Center): AIP, Germany; SAP Saclay, CDS Strasbourg, CESR Toulouse, France; University of Leicester, Institute of Astronomy Cambridge, MSSL London, UK.

XMM-Newton/EPIC (European Photo Imaging Camera): SAP Saclay, IAS Orsay, CESR Toulouse, France; University of Leicester, University Birmingham, UK; CNR Mailand-

Palermo-Bologna-Frascati, Osservatorio Astronomico Mailand, Italy; Institut für Astronomie und Astrophysik Tübingen, Germany.

Industrielle Kollaborationen

3d shape GmbH, Erlangen: Metrology for slumped glass mirror study.

ABN GmbH, Neuried: Ongoing servicing of the MPE test facility PANTER.

ACM GmbH, Naumburg - Acktar Ltd., Kiryat-Gat, Israel: Schwärzen für EUCLID.

af inventions, Braunschweig: FPGA Programmierung für eROSITA.

AHC Oberflächentechnik GmbH / Aalberts Surface Technologies GmbH: coating for MICADO

ALPAO, Montbonnot-Saint-Martin, France: GRAVITY+ deformable mirrors.

Alwin Müller GmbH & Co. KG, Nürnberg: Oberflächenbeschichtung vieler Projekte.

Ariane Group GmbH, Munich: EUCLID design study, eROSITA, ATHENA, Oberflächenbeschichtung und cleanliness control EinsteinProbe.

Array Electronics, Eggenstein: DAQ development OPTIMA.

BASF Coatings AG, Münster: Investigations on the scattering properties of micro particles.

Bräuninger & Konstruktionen, Neuried: Construction and manufacturing of laboratory equipment.

Buchberger GmbH, Tuchenbach: Manufacturing of parts for PANTER manipulators.

Carl Zeiss QEC GmbH, Garching b. München, Deutschland: Messdienstleistungen, EinsteinProbe.

Christian Rehm - ISKON, Isen: Design and mechanical engineering for MICADO, GRAVITY+.

CryoVac GmbH, Troisdorf: MICADO Cryostat.

DHL Special services, Flughafen München, EinsteinProbe.

Dico-Solutions, München: eROSITA Betrieb.

DoKaSch TEMPERATURE SOLUTIONS GmbH, Kelsterbach, Deutschland: klimatisierte Frachtcontainer, EinsteinProbe.

ECM Engineered Ceramic Materials GmbH, Moosinning: Hersteller von CESIC.

EATON Powering Business Worldwide, Camarillo, CA, USA: Actuators separation-nuts for eROSITA.

First Light Imaging, Meyreuil, France: GRAVITY+ wavefront sensor cameras.

Fraunhofer IOF, Jena: Mirror development for MICADO.

Freyer GmbH, Tuningen: PANTER.

Frühschütz Lohngalvanik GmbH, Penzberg: Oberflächenbeschichtung vieler Projekte.

Gräfe Spezialoptik GmbH, Camburg: Zerodur-Materialbearbeitung und -Lieferant.

Hans Englert GmbH, Berlin: Manufacturing of front panels and metering devices.

HERMLE AG, Gosheim, Milling Machines, MPE Workshop. HOC Optik Dr. Christoph Horneber, Lauf: GRAVITY+

Hochschule München, Laserlabor, Prof. Heinz Huber, München: Materialbearbeitung mit Ultrakurzpulsar laser.

Industrieanlagen – Betriebsgesellschaft mbH (IABG), Ottobrunn: Testanlagen, Luftfahrtsicherheit, EinsteinProbe.

Industrieberatung Reinhard Katterloher, München: Specifications for MICADO Test Cryostat.

Ingenieurbüro Josef Eder, Hilgertshausen: System engineering for eROSITA, ATHENA, Einstein Probe.

Ingenieurbüro Weisz, München: Design and mechanical engineering for MICADO and GRAVITY+.

Ingenieurbüro Michael Kautz, Regensburg, Design and mechanical engineering for CAS.

Kampf Telescope Optics (KTO), München: Design & System Engineering for MICADO.

LaserJob GmbH, Fürstenfeldbruck, Deutschland: Präzisions-Laserzuschnitt und Schweißen EinsteinProbe. LEX GmbH, Miesbach, Deutschland:

Mechanische Fertigung, ATHENA, EinsteinProbe.

LT Ultra, Herdwangen-Schönach: Spiegelhersteller.

Feinmechanische Werkstätte Thomas Markl GmbH, Deisenhofen; eROSITA.

GEWO Feinmechanik GmbH, Hörlkofen: EinsteinProbe, MICADO.

Media Lario Srl, Bosisio Parini, Italien: eROSITA, EinsteinProbe.

OHB System AG, München: EUCLID design study.

Peter Blank GmbH, Aschaffenburg: Mechanische Fertigung MICADO, GRAVITY+.

Peter Feckl Maschinenbau GmbH, Forstern: Spiegelmodule EinsteinProbe.

Physik Instrumente (PI): Präzisions-Positionier-Systeme.

Plappert Industrieanlagen GmbH, Schorndorf: Design and mechanical engineering for MICADO Handling Tools.

Qioptic GmbH, Feldkirchen: Oberflächenbeschichtung vieler Projekte.

Steinmeyer Mechatronik, Dresden: GRAVITY+ translational stages.

Tafelmaier Dünnschicht-Technik, Rosenheim: Optical Coatings, GRAVITY+.

Tesat-Spacecom GmbH & Co. KG, Backnang: FMECA und Zuverlässigkeitsanalyse für ATHENA WFI.

Unholtz-Dickie Corp., Wallingford, USA: Shaker System, MPE Test Facility.

Steinmeyer Mechatronik, Dresden: GRAVITY+ translational stages.

Tafelmaier Dünnschicht-Technik, Rosenheim: Optical Coatings, GRAVITY+.

Unholtz-Dickie Corp., Wallingford, USA: Shaker System, MPE Test Facility.

Aktivitäten im Wissenstransfer

Durch unsere vielen Kooperationen mit anderen Forschungseinrichtungen und der Industrie ergibt sich ein natürlicher Wissenstransfer.

Dies gilt auch bei der Vergabe von Aufträgen an die Industrie. Des Weiteren hielt das MPE Ende 2022 17 Patente und 4 Lizenzen.