

CONTACT INFORMATION	<p>H.L. Dodge Department of Physics &amp; Astronomy University of Oklahoma 440 W. Brooks St Norman, OK 73019 USA</p>	<p>+1 440 290 9387 <a href="mailto:nathan.kaib@ou.edu">nathan.kaib@ou.edu</a> <a href="http://nathankaib.com">nathankaib.com</a> Citizenship: U.S.</p>
APPOINTMENTS	<p>2023 - present <b>Planetary Science Institute</b>, Dubuque, IA, USA Senior Scientist</p> <p>2021 - 2023 <b>University of Oklahoma</b>, Norman, OK, USA Associate Professor, Department of Physics &amp; Astronomy</p> <p>2015 - 2021 <b>University of Oklahoma</b>, Norman, OK, USA Assistant Professor, Department of Physics &amp; Astronomy</p> <p>2014 - 2015 <b>Carnegie Institution of Washington</b>, Washington, DC, USA DTM Postdoctoral Fellow, Department of Terrestrial Magnetism <i>Supervisor:</i> John Chambers</p> <p>2012 - 2014 <b>Northwestern University</b>, Evanston, IL, USA CIERA Postdoctoral Fellow, Department of Physics &amp; Astronomy <i>Supervisor:</i> Yoram Lithwick</p> <p>2010 - 2012 <b>Queen's University</b>, Kingston, ON, Canada CITA National Fellow, Department of Physics &amp; Astronomy <i>Supervisor:</i> Martin Duncan</p>	
DEGREES	<p>2010 Ph.D. in astronomy, <b>University of Washington</b>, Seattle, WA, USA <i>Advisor:</i> Tom Quinn</p> <p>2002 B.S. in physics, <b>Case Western Reserve University</b>, Cleveland, OH, USA</p>	
HONORS AND AWARDS	<p>2022 James and JoAnn Holden Faculty Award</p> <p>2021 C.B. Hudson/Torchmark Presidential Professorship</p> <p>2017 Asteroid 10275 renamed in my honor</p> <p>2014 Carnegie Fellow, Carnegie Institution for Science</p> <p>2012 CIERA Fellow, Northwestern University</p> <p>2011 NASA ADS Article of the Year</p> <p>2010 CITA National Fellow, Queen's University</p> <p>2007 NASA Earth and Space Science Fellow</p> <p>2002 Presidential Scholar, Case Western Reserve University</p>	
GRANTS (\$2.3M IN EXTERNAL FUNDING)	<p>2023 \$554,324 - NASA Emerging Worlds (Co-I)</p> <p>2022 \$278,312 - NASA Emerging Worlds (PI)</p> <p>2021 \$7,000 - University of Oklahoma CAS Junior Faculty Fellowship</p> <p>2018 \$521,258 - NSF CAREER (PI)</p> <p>2018 \$345,431 - NASA Exoplanets Research Program (PI)</p> <p>2018 \$287,987 - NSF Astronomy &amp; Astrophysics (PI)</p> <p>2018 \$7,000 - University of Oklahoma VPR Junior Faculty Fellowship</p> <p>2017 \$316,000 - NASA Emerging Worlds (PI)</p> <p>2017 \$50,000 - NSF Blue Waters Flow-Through Funding for GRA</p> <p>2017 \$7,000 - University of Oklahoma VPR Junior Faculty Fellowship</p> <p>2016 \$226,735 - NSF Astronomy &amp; Astrophysics (PI)</p> <p>2016 \$7,000 - University of Oklahoma CAS Junior Faculty Fellowship</p> <p>2014 \$59,001 - NASA Hubble Theory grant</p> <p>2007 - 2014 \$350,000 in fellowships</p>	

MEMBERSHIP AND SERVICE	<p>Head of Outer Solar Systems Origins Survey (OSSOS) scattering objects team</p> <p>Member of Vera Rubin Observatory solar system science collaboration</p> <p>Referee for <i>Nature</i>, <i>Nature Astronomy</i>, <i>Nature Communications</i>, <i>Science Advances</i>, <i>Icarus</i>, <i>ApJ</i>, <i>A&amp;A</i>, <i>EPSL</i>, and <i>MNRAS</i></p> <p>Reviewer for NASA Discovery and Emerging Worlds programs</p> <p>Reviewer for Blue Waters Fellowship and Goldwater Scholarship</p> <p>2020 LOC for Conference for Undergraduate Women in Physics</p>
RESEARCH MENTORING	<p>2022 - 2023 Sean Smith, <i>undergraduate student</i>, University of Oklahoma</p> <p>2021 - present Reshma Reba Alexander, <i>graduate student</i>, University of Oklahoma</p> <p>2019 - 2021 Alex Parsells, <i>undergraduate student</i>, University of Oklahoma</p> <p>2019 - 2019 Sarah Wozniak, <i>summer REU student</i>, University of Oklahoma</p> <p>2018 - present Kalee Anderson, <i>graduate student</i>, University of Oklahoma</p> <p>2018 - present Hunter Campbell, <i>graduate student</i>, University of Oklahoma</p> <p>2018 - present Nickalas Reynolds, <i>graduate student</i>, University of Oklahoma</p> <p>2018 - 2021 Lukas Stone, <i>undergraduate student</i>, University of Oklahoma</p> <p>2018 - 2021 Elizabeth Ellithorpe, <i>graduate student</i>, University of Oklahoma</p> <p>2018 - 2019 Rajeeb Sharma, <i>graduate student</i>, University of Oklahoma</p> <p>2018 - 2018 Maya Kovalik, <i>summer REU student</i>, University of Oklahoma</p> <p>2017 - 2018 Christopher Brown, <i>undergraduate student</i>, University of Oklahoma</p> <p>2017 - 2017 Katherine Shepard, <i>summer REU student</i>, University of Oklahoma</p> <p>2016 - 2018 Billy Quarles, <i>postdoctoral researcher</i>, University of Oklahoma</p> <p>2016 - 2018 Ethan White, <i>undergraduate student</i>, University of Oklahoma</p> <p>2015 - 2019 Matt Clement, <i>graduate student</i>, University of Oklahoma</p> <p>2015 - 2017 Josiah Purdham, <i>undergraduate student</i>, University of Oklahoma</p> <p>2015 - 2016 Arthur Bulin, <i>undergraduate student</i>, University of Oklahoma</p>
TEACHING	<p>Spring 2023 ASTR 3113 <i>Galaxies &amp; Cosmology</i></p> <p>Fall 2022 ASTR 1523 <i>Life in the Universe</i></p> <p>Spring 2021 ASTR 1523 <i>Life in the Universe</i></p> <p>Spring 2020 ASTR 5900 <i>Planetary Astrophysics</i></p> <p>Fall 2019 ASTR 2513 <i>Introductory Astrophysics</i></p> <p>Fall 2018 ASTR 2513 <i>Introductory Astrophysics</i></p> <p>Spring 2018 ASTR 1523 <i>Life in the Universe</i></p> <p>Fall 2017 ASTR 2513 <i>Introductory Astrophysics</i></p> <p>Spring 2017 ASTR 5900 <i>Planetary Astrophysics</i></p> <p>Fall 2016 ASTR 1514/1504 <i>Astronomy: Exploring the Universe</i></p> <p>Spring 2016 ASTR 1523 <i>Life in the Universe</i></p> <p>Fall 2015 ASTR 1514/1504 <i>Astronomy: Exploring the Universe</i></p>
RECENT OUTREACH	<p>2022 OKC Astronomy Club, Oklahoma City, OK (public talk)</p> <p>2022 Cuyahoga Astronomy Club, Cleveland, OH (public talk)</p> <p>2022 Lorain County Community College Sciencepalooza, Elyria, OH (public talk)</p> <p>2021 Origins Science Scholars Program (locally televised/webcast public talk)</p> <p>2021 Origins Science Scholars Program (locally televised/webcast public talk)</p> <p>2021 Sam Noble Museum Volunteer Brown Bag Seminar, Norman, OK (public talk)</p> <p>2019 The Planetary Society's Planetary Radio, Oklahoma City, OK (podcast guest)</p> <p>2018 Postcards From the Universe Lecture Series, Norman, OK (speaker)</p> <p>2018 Student-led Science Cafe Poster Session, Norman, OK (organizer)</p> <p>2017 Student-led Science Cafe Poster Session, Norman, OK (organizer)</p> <p>2017 OU Jurassic Journeymen Meeting (guest speaker)</p> <p>2017 Discover Oklahoma, Norman, OK (interview on Sam Noble's Astronomy exhibit)</p> <p>2017 KFOR Rise &amp; Shine Morning Show, Oklahoma City, OK (on-air interview)</p> <p>2017 Sam Noble Museum Volunteer Brown Bag Seminar, Norman, OK (public talk)</p>

- 2017 Geophysical Society of Oklahoma City, Oklahoma City, OK (public talk)  
 2017 Student-led Science Cafe Poster Session, Norman, OK (organizer)  
 2016 Norman Public Library Science Cafe, Norman, OK (public talk)  
 2016 Fred Jones Jr. Museum of Art, Norman, OK (public talk)

## SELECTED PRESS

- 2022 *Comets fade even as deep in space as Saturn's orbit*, Space.com  
 2021 *Simulations offer observational test for Planet Nine hypothesis*, Physics World  
 2018 *There's a goblin lurking on the outskirts of our solar system*, Popular Science  
 2018 *Why Mars turned into a planetary runt*, Forbes  
 2015 *Monster planet is 'dancing with the stars'*, Carnegie Press Release  
 2015 *Jupiter may have ejected a planet from our solar system*, Forbes  
 2013 *Exoplanets coming and going everywhere*, AAS Press Conference  
 2011 *Alien planet rolling over, forces others to do the same*, MS-NBC  
 2011 *Science signs of the Sun's passage - Editor's Choice*, Science  
 2009 *Comets 'not cause of mass extinctions'*, BBC

## RECENT INVITED TALKS

- 2024 **Iowa State University**, Astronomy seminar  
 2022 **Case Western Reserve University**, Astronomy colloquium  
 2022 **Case Western Reserve University**, Physics colloquium  
 2021 **Oberlin College**, Physics & Astronomy colloquium  
 2021 **Case Western Reserve University**, Astronomy seminar  
 2021 **N-Body Shop Excellence Conference**, Invited speaker  
 2019 **Texas A&M University**, Physics & Astronomy colloquium  
 2019 **McGill University**, Astronomy colloquium  
 2018 **AAS Division on Dynamical Astronomy**, Invited speaker  
 2018 **University of Colorado at Boulder**, Astronomy colloquium  
 2018 **Carnegie Institution of Washington**, DTM colloquium  
 2017 **University of Oklahoma**, Geology & Geophysics colloquium  
 2017 **Canadian Institute for Theoretical Astrophysics**, Astronomy seminar  
 2017 **University of Toronto - Scarborough**, Astronomy seminar  
 2017 **Asteroids, Comets, Meteors**, Invited speaker  
 2016 **International Workshop on Comets**, Invited speaker  
 2014 **Carnegie Institution of Washington**, Astronomy seminar  
 2014 **University of Oklahoma**, Physics & Astronomy colloquium  
 2013 **University of Michigan**, Invited seminar  
 2013 **Caltech**, Planetary science colloquium

## RECENT CONFERENCE TALKS

- Comets Fade in the Outer Solar System*  
 2023 **AAS General Meeting**, Seattle, WA  
*Scattering Objects as a Probe of the Distant Solar System*  
 2021 **AAS Division for Planetary Sciences Meeting**, Virtual  
*The Number of Pluto-Mass Bodies in the Primordial Kuiper Belt*  
 2021 **AAS Division on Dynamical Astronomy Meeting**, Virtual  
*Inferring the Primordial Pluto-mass Population of the Kuiper Belt*  
 2021 (Invited) **N-Body Shop Excellence Conference**, Virtual  
*Outer Solar System Evolution with a self-interacting Kuiper belt*  
 2019 **AAS General Meeting**, Seattle, WA  
*Scattering Objects as a Probe of the Distant Solar System*  
 2018 (Invited) **AAS Division on Dynamical Astronomy Meeting**, San Jose, CA  
*Using Real and Simulated TNOs to Constrain the Outer Solar System*  
 2018 **AAS General Meeting**, Washington, DC  
*Fomalhaut's Stellar Companions as the Driver of its Morphology*  
 2017 (Invited) **Asteroids, Comets, Meteors**, Montevideo, Uruguay  
*Timing the Oort Cloud's and Kuiper Belt's Formation*

- 2016 **AAS Division for Planetary Sciences Meeting**, Pasadena, CA  
*Tracking Neptune's Footprints with High-Perihelion Resonant TNOs*
- 2016 (Invited) **International Workshop on Comets**, Paris, France  
*Probing the Oort Cloud with Centaurs*
- 2016 **AAS General Meeting**, Kissimmee, FL  
*The Fragility of the Terrestrial Planets During a Giant Planet Instability*

PUBLICATIONS  
(68 PAPERS,  
17 FIRST-AUTHOR,  
H-INDEX: 33)

“Passing Stars as an Important Driver of Paleoclimate and the Solar System’s Orbital Evolution”  
**Kaib, N. A.** & Raymond, S. N., *Astrophysical Journal Letters*, in press.

“Dynamical Population of Comet Reservoirs” (Invited Review Chapter)  
**Kaib, N. A.**, Volk, K., *Comets III*, in press.

“Future trajectories of the Solar System: dynamical simulations of stellar encounters within 100 au”  
Raymond, S. N., **Kaib, N. A.**, Selsis, F., Bouy, H. *Monthly Notices of the Royal Astronomical Society*, 527: 6126, 2024.

“Oort cloud (exo)planets”  
Raymond, S. N., Izidoro, A., **Kaib, N. A.** *Monthly Notices of the Royal Astronomical Society*, 524: L72, 2023.

“Mercury’s formation within the early instability scenario”  
Clement, M. S., Chambers, J. E., **Kaib, N. A.**, Raymond, S. N., Jackson, A. P., *Icarus*, 394: 115445, 2023.

“Comparisons of the core and mantle compositions of earth analogs from different terrestrial planet formation scenarios”  
Gu, J. T., Fischer, R. A., Brennan, M. C., Clement, M. S., Jacobson, S. A., **Kaib, N. A.**, O’Brien, D. P., Raymond, S. N., *Icaurs*, 394: 115425, 2023.

“Close TNO Passages as a Driver of the Origin and Evolution of Ultra-Wide Kuiper Belt Binaries”  
Campbell, H., **Kaib, N. A.**, *Astronomical Journal*, 165: 19, 2023.

“On the Dynamics of Planetary Systems in Embedded Cluster Environments”  
Ellithorpe, E. A., **Kaib, N. A.**, *Monthly Notices of the Royal Astronomical Society*, 515: 2914, 2022.

“Comet Fading Begins Beyond Saturn”  
**Kaib, N. A.**, *Science Advances*, 8: eabm9130, 2022.

“Signatures of a Distant Planet on the Inclination Distribution of the Detached Kuiper Belt”  
Anderson, K. E., **Kaib, N. A.**, *Astrophysical Journal Letters*, 920: L9, 2021.

“The Early Instability Scenario: Mars’ Mass Explained by Jupiter’s Orbit”  
Clement, M. S., **Kaib, N. A.**, Raymond, S. N., Chambers, J. E., *Icarus*, 367: 114585, 2021.

“Born Extra-Eccentric: A Broad Spectrum of Primordial Configurations of the Gas Giants that Match Their Present-Day Orbits”  
Clement, M. S., Deienno, R., **Kaib, N. A.**, Raymond, S. N., Izidoro, A., Chambers, J. E., *Icarus*, 367: 114556, 2021.

“Evolution of Primordial Kuiper Belt Binaries Through a Giant Planet Instability”  
Stone, L. R., **Kaib, N. A.**, *Monthly Notices of the Royal Astronomical Society*, 505: L31, 2021.

“Born Eccentric: Constraints on Jupiter and Saturn’s pre-instability orbits”

Clement, M. S., Raymond, S. N., **Kaib, N. A.**, Deienno, R., Chambers, J. E., Izidoro, A., *Icarus*, 355: 114122, 2021.

“Survivor Bias: divergent fates of the Solar System’s ejected vs. persisting planetesimals”

Raymond, S. N., **Kaib, N. A.**, Armitage, P. J., Fortney, J. J., *Astrophysical Journal Letters*, 904: L4, 2020.

“Orbital Precession in the Distant Solar System; Further Constraining the Planet Nine Hypothesis with Numerical Simulations”

Clement, M. S., **Kaib, N. A.**, *Astronomical Journal*, 159: 285, 2020.

“Embryo Formation with GPU Acceleration: Reevaluating the Initial Conditions for Terrestrial Planet Formation”

Clement, M. S., **Kaib, N. A.**, Chambers, J. E., *Planetary Science Journal*, 1: 18, 2020.

“A Record of Saturn’s Final Migration Fossilized in the Asteroid Belt’s Orbital Structure”

Clement, M. S., Morbidelli, A., Raymond, S. N., **Kaib, N. A.**, *MNRAS*, 492: L56-L60, 2020.

“OSSOS. XV. Probing the Distant Solar System with Observed Scattering TNOs”

**Kaib, N. A.**, Lawler, S. M., Pike R. E., Kovalik, M., Brown, C., *Astronomical Journal*, 158: 43, 2019.

“OSSOS. XIII. Fossilized Resonant Dropouts Tentatively Confirm Neptune’s Migration was Grainy and Slow”

Lawler, S. M., Pike, R. E., **Kaib, N.**, Alexandersen, M., Bannister, M. T., Chen, Y. -T., Gladman, B., Gwyn, S., Kavelaars, J. J., Petit, J. -M., Volk, K., *Astronomical Journal*, 157: 253.

“Dynamical Constraints on Mercury’s Collisional Origin”

Clement, M. S., **Kaib, N. A.**, Chambers, J. E., *Astronomical Journal*, 157: 208, 2019.

“A New High Perihelion Inner Oort Cloud Object”

Sheppard, S., Trujillo, C., Tholen, D., **Kaib, N.**, *Astronomical Journal*, 157: 139, 2019.

“Instabilities in the Early Solar System due to a Self-gravitating Disk”

Quarles, B., **Kaib, N. A.**, *Astronomical Journal*, 157: 67, 2019.

“Excitation and Depletion of the Asteroid Belt in the Early Instability Scenario”

Clement, M. S., Raymond, S. N., **Kaib, N. A.**, *Astronomical Journal*, 157: 38, 2019.

“The Early Instability Scenario: Terrestrial Planet Formation During the Giant Planet Instability, and the Effect of Collisional Fragmentation ”

Clement, M. S., **Kaib, N. A.**, Raymond, S. N., Walsh, K. J., Chambers, J. E., *Icarus*, 321: 778, 2019.

“Galactic Effects on Planetary Habitability”

**Kaib, N. A.**, in Deeg, H. G. & Belmonte, J. A., eds, *Handbook of Exoplanets* (invited chapter), Springer International Publishing, p. 3091, 2018.

“OSSOS. VII. 800+ Trans-Neptunian Objects – The Complete Data Release”

Bannister, M. T., Gladman, B. J., Kavelaars, J. J., Petit, J., Volk, K., Chen, Y., Alexandersen, M., Gwyn, S. D. J., Schwamb, M. E., Ashton, E., Benecchi, S. D., Cabral, N., Dawson, R. I.; Delsanti, A., Fraser, W. C., Granvik, M., Greenstreet, S., Guilbert-Lepoutre, A., Ip, W., Jakubik, M., Jones, R. L., **Kaib, N. A.**, Lacerda, P., Van Laerhoven, C., Lawler, S., Lehner, M. J., Lin, H. W., Lykawka, P. S., Marsset, M., Murray-Clay, R., Pike, R. E., Rousselot, P., Shankman, C.,

Thirouin, A., Vernazza, P., Wang, S., *Astrophysical Journal Supplement Series*, 236: 18, 2018.

“OSSOS. VIII. The Transition between Two Size Distribution Slopes in the Scattering Disk”  
Lawler, S. M., Shankman, C., Kavelaars, J. J., Alexandersen, M., Bannister, M. T., Chen, Ying-Tung, Gladman, B., Fraser, W. C., Gwyn, S., **Kaib, N.**, Petit, J. -M., Volk, K., *Astronomical Journal*, 155: 197, 2018.

“Stability Limits of Circumbinary Planets: Is There a Pile-up in the Kepler CBPs?”  
Quarles, B., Satyal, S., Kostov, V., **Kaib, N.** and Haghhighipour, N., *Astronomical Journal*, 856: 150, 2018.

“Mars’ Growth Stunted by an Early Giant Planet Instability”  
Clement, M., **Kaib, N. A.**, Raymond, S. N. and Walsh, K., *Icarus*, 311: 340, 2018.

“Long-Term Stability of Planets in the Centauri System, II: Forced Eccentricities”  
Quarles, B., Lissauer, J. J., and **Kaib, N.**, *Astronomical Journal*, 155: 64, 2018.

“Simulations of the Fomalhaut system within its local galactic environment”  
**Kaib, N. A.**, White, E. B. and Izidoro, A., *MNRAS*, 473: 470–491, 2018.

“Origin and Evolution of Short-period Comets”  
Nesvorný, D., Vokrouhlický, D., Dones, L., Levison, H. F., **Kaib, N.** and Morbidelli, A., *Astrophysical Journal*, 845: 27, 2017.

“OSSOS. VI. Striking Biases in the Detection of Large Semimajor Axis Trans-Neptunian Objects”  
Shankman, C., Kavelaars, J. J., Bannister, M. T., Gladman, B. J., Lawler, S. M., Chen, Y.-T., Jakubik, M., **Kaib, N.**, Alexandersen, M., Gwyn, S. D. J., Petit, J.-M. and Volk, K., *Astronomical Journal*, 154: 50, 2017.

“OSSOS. V. Diffusion in the Orbit of a High-perihelion Distant Solar System Object”  
Bannister, M. T., Shankman, C., Volk, K., Chen, Y.-T., **Kaib, N.**, Gladman, B. J., Jakubik, M., Kavelaars, J. J., Fraser, W. C., Schwamb, M. E., Petit, J.-M., Wang, S.-Y., Gwyn, S. D. J., Alexandersen, M. and Pike, R. E., *Astronomical Journal*, 153: 262, 2017.

“Prevalence of Chaos in Planetary Systems Formed Through Embryo Accretion”  
Clement, M. and **Kaib, N. A.**, *Icarus*, 288: 88–98, 2017.

“Observational Signatures of a Massive Distant Planet on the Scattering Disk”  
Lawler, S. M., Shankman, C., **Kaib, N.**, Bannister, M. T., Gladman, B. and Kavelaars, J. J., *Astronomical Journal*, 153: 33, 2017.

“Tracking Neptune’s Migration History through High-perihelion Resonant Trans-Neptunian Objects”  
**Kaib, N. A.** and Sheppard, S. S., *Astronomical Journal*, 152: 133, 2016.

“OSSOS. IV. Discovery of a Dwarf Planet Candidate in the 9:2 Resonance with Neptune”  
Bannister, M. T., Alexandersen, M., Benecchi, S. D., Chen, Y.-T., Delsanti, A., Fraser, W. C., Gladman, B. J., Granvik, M., Grundy, W. M., Guilbert-Lepoutre, A., Gwyn, S. D. J., Ip, W.-H., Jakubik, M., Jones, R. L., **Kaib, N.**, Kavelaars, J. J., Lacerda, P., Lawler, S., Lehner, M. J., Lin, H. W., Lykawka, P. S., Marsset, M., Murray-Clay, R., Noll, K. S., Parker, A., Petit, J.-M., Pike, R. E., Rousselot, P., Schwamb, M. E., Shankman, C., Veres, P., Vernazza, P., Volk, K., Wang, S.-Y. and Weryk, R., *Astronomical Journal*, 152: 212, 2016.

“The Outer Solar System Origins Survey: I. Design and First-Quarter Discoveries”  
Bannister, M. T., Kavelaars, J. J., Petit, J.-M., Gladman, B. J., Gwyn, S. D. J., Chen, Y.-T.,

Volk, K., Alexandersen, M., Benecchi, S., Delsanti, A., Fraser, W., Granvik, M., Grundy, W. M., Guilbert-Lepoutre, A., Hestroffer, D., Ip, W.-H., Jakubik, M., Jones, L., **Kaib, N.**, Lacerda, P., Lawler, S., Lehner, M. J., Lin, H. W., Lister, T., Lykawka, P. S., Monty, S., Marsset, M., Murray-Clay, R., Noll, K., Parker, A., Pike, R. E., Rousselot, P., Rusk, D., Schwamb, M. E., Shankman, C., Sicardy, B., Vernazza, and P., Wang, S.-Y., *Astrophysical Journal*, 152: 70, 2016.

“Cosmologists in Search of Planet Nine: The Case for CMB Experiments”

Cowan, N. B. and Holder, G. and **Kaib, N. A.**, *Astrophysical Journal Letters* 822: L2, 2016.

“MagAO Imaging of Long-Period Objects (MILO). I. A Benchmark M Dwarf Companion Exciting a Massive Planet Around the Sun-Like Star HD 7449”

Rodigas, T. J., Arriagada, P., Faherty, J., Anglada-Escude, G., **Kaib, N.**, Butler, R. P., Shectman, S., Weinberger, A., Males, J. R., Morzinski, K. M., Close, L. M., Hinz, P. M., Crane, J. D., Thompson, I., Teske, J., Diaz, M., Minniti, D., Lopez-Morales, M., Adams, F. C. and Boss, A. P., *Astrophysical Journal*, 818: 106, 2016.

“The Fragility of the Terrestrial Planets During a Giant Planet Instability”

**Kaib, N. A.** and Chambers, J. E., *MNRAS*, 455: 3561, 2016.

“OSSOS II: A Sharp Transition in the Absolute Magnitude Distribution of the Kuiper Belt’s Scattering Population”

Shankman, C., Kavelaars, J. J., Gladman, B. J., Alexandersen, M., **Kaib, N.**, Petit, J.-M., Bannister, M. T., Chen, Y.-T., Gwyn, S., Jakubik, M. and Volk, K., *Astrophysical Journal*, 151: 31, 2015.

“Origin and Evolution of the Cometary Reservoirs”

Dones, L., Brasser, R., **Kaib, N.** and Rickman, H., *Space Science Reviews*, 2015.

“Direct Exoplanet Detection with Binary Differential Imaging”

Rodigas, T. J., Weinberger, A., Mamajek, E. E., Males, J. R., Close, L. M., Morzinski, K., Hinz, P. M. and **Kaib, N.**, *Astrophysical Journal*, 811: 157, 2015.

“Brief Follow-up on Recent Studies of Theia’s Accretion”

**Kaib, N. A.** and Cowan, N. B., *Icarus*, 258: 14–17, 2015.

“The Feeding Zones of Terrestrial Planets and Insights into Moon Formation”

**Kaib, N. A.** and Cowan, N. B., *Icarus*, 252: 161–174, 2015.

“Rossiter-McLaughlin Observations of 55 Cnc e”

López-Morales, M., Triaud, A. H. M. J., Rodler, F., Dumusque, X., Buchhave, L. A., Harutyunyan, A., Hoyer, S., Alonso, R., Gillon, M., **Kaib, N. A.**, Latham, D. W., Lovis, C., Pepe, F., Queloz, D., Raymond, S. N., Ségransan, D., Waldmann, I. P. and Udry, S., *Astrophysical Journal Letters*, 792, 2014.

“Very Wide Binary Stars as the Dominant Source of Stellar Collisions in the Galaxy”

**Kaib, N. A.** and Raymond, S. N., *Astrophysical Journal*, 782, 2014.

“Influence of Outer Solar System Architecture on the Structure and Evolution of the Oort Cloud”

Lewis, A. R., Quinn, T. and **Kaib, N. A.**, *Astronomical Journal*, 146, 2013.

“Planet Hunters: A Transiting Circumbinary Planet in a Quadruple Star System”

Schwamb, M. E., Orosz, J. A., Carter, J. A., Welsh, W. F., Fischer, D. A., Torres, G., Howard, A. W., Crepp, J. R., Keel, W. C., Lintott, C. J., **Kaib, N. A.**, Terrell, D., Gagliano, R., Jek, K. J., Parrish, M., Smith, A. M., Lynn, S., Simpson, R. J., Giguere, M. J. and Schawinski, K., *Astrophysical Journal*, 768: 127–147, 2013.

“A Divot in the Size Distribution of the Kuiper Belt’s Scattering Objects”

Shankman, C., Gladman, B. J., **Kaib, N.**, Kavelaars, J. J. and Petit, J. M., *Astrophysical Journal Letters*, 764: L2, 2013.

“Planetary System Disruption by Galactic Perturbations to Wide Binary Stars”

**Kaib, N. A.**, Raymond, S. N. and Duncan, M., *Nature*, 493: 381–384, 2013.

“55 Cancri: A Coplanar Planetary System that is Likely Misaligned with its Star”

**Kaib, N. A.**, Raymond, S. N. and Duncan, M. J., *Astrophysical Journal Letters*, 742: L24, 2011.

“Sedna and the Oort Cloud Around a Migrating Sun”

**Kaib, N. A.**, Roškar, R. and Quinn, T., *Icarus*, 215: 491–507, 2011.

“Decreasing Computing Time with Symplectic Correctors in Adaptive Timestepping Routines”

**Kaib, N. A.**, Quinn, T. and Brasser, R., *Astronomical Journal*, 141:1–7, 2011.

“Oort Cloud Formation at Various Galactic Distances”

Brasser, R., Higuchi, A. and **Kaib, N.**, *Astronomy & Astrophysics*, 516:A72–A83, 2010.

“CoRoT-7 b: Super-Earth or Super-IO?”

Barnes, R., Raymond, S. N., Greenberg, R., Jackson, B. and **Kaib, N. A.**, *Astrophysical Journal*, 709:L95–L98, 2010.

“Building the Terrestrial Planets: Constrained Accretion in the Inner Solar System”

Raymond, S. N., O’Brien, D. P., Morbidelli, A. and **Kaib, N. A.**, *Icarus*, 203:644–662, 2009.

“Reassessing the Source of Long-Period Comets”

**Kaib, N. A.** and Quinn, T., *Science*, 325:1234–1236, 2009.

“2006 SQ<sub>372</sub>: A Likely Long-Period Comet from the Inner Oort Cloud”

**Kaib, N. A.**, Becker, A. C., Jones, R. L., Puckett, A. W., Bizyaev, D., Dilday, B., Frieman, J. A., Oravetz, D. J., Pan, K., Quinn, T., Schneider, D. P. and Watters, S., *Astrophysical Journal*, 695:268–275, 2009.

“The Formation of the Oort Cloud in Open Cluster Environments”

**Kaib, N. A.** and Quinn, T., *Icarus*, 197:221–238, 2008.

“Exploring the Outer Solar System with the ESSENCE Supernova Survey”

Becker, A. C., Arraki, K., **Kaib, N. A.**, Wood-Vasey, W. M., Aguilera, C., Blackman, J. W., Blondin, S., Challis, P., Clocchiatti, A., Covarrubias, R., Damke, G., Davis, T. M., Filippenko, A. V., Foley, R. J., Garg, A., Garnavich, P. M., Hicken, M., Jha, S., Kirshner, R. P., Krisciunas, K., Leibundgut, B., Li, W., Matheson, T., Miceli, A., Miknaitis, G., Narayan, G., Pignata, G., Prieto, J. L., Rest, A., Riess, A. G., Salvo, M. E., Schmidt, B. P., Smith, R. C., Sollerman, J., Spyromilio, J., Stubbs, C. W., Suntzeff, N. B., Tonry, J. L. and Zenteno, A., *Astrophysical Journal*, 682:L53–L56, 2008.

“Predicting Planets in Known Extrasolar Planetary Systems. III. Forming Terrestrial Planets”

Raymond, S. N., Barnes, R. and **Kaib, N. A.**, *Astrophysical Journal*, 644:1223–1231, 2008.

“Deep CCD Surface Photometry of Galaxy Clusters. II. Searching for Intracluster Starlight in Non-cD Clusters”

Feldmeier, J. J., Mihos, J. C., Morrison, H. L., Harding, P. and **Kaib, N.**, *Astrophysical Journal*, 609:617–637, 2004.