

A Complete Bibliography of Publications in the *SIAM Journal on Optimization*

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Title word cross-reference

<p>#P [TSAKN23]. #P-Hard [TSAKN23].</p> <p>$(k + 1)$ [BHKM14]. $(L_r, L_r, 1)$ [SVD14]. $(n - 1)$ [JMW08]. + [BAC11, Las10]. 0 [BZ04, Che15, Las02, LS91, RQMG12]. 0.999 [Mas97]. 0/1 [ZPXQ21]. $0 < q \leq 1$ [LW11a]. 1 [BZ04, CCFP05, Che15, HAN11, HL06, Las02, LS91, RQMG12, XFLP21]. $1/k^2$ [AP16]. 1024 [GR94]. 2 [Cri22, DV16, HL11, IS02b, Lin08, Ris94, ZL02]. 3 [STY15]. 4 [STY15]. 5 [Eck94]. α [MLRR93]. B [FT07, HMW13, MS11c]. $b \leq 3$ [VJFC18]. C [HK09]. $C^{1,1}$ [BDS10, BK10]. C^2 [WP23]. $C^{k,1}$ [Luc95]. D_2^* [Dan93]. ℓ_0 [LBT22, SBFA17]. ℓ_1</p>	<p>[DV14, LMW16, CCR17, DLR16, DV16, KV17, WLS23, CO12a, GP04, HYZ08, ZL12]. ℓ_2 [SBFA17]. $\ell_{2,0}$ [TQP22]. $\ell_{2,1}$ [XLxY21]. ℓ_∞ [LL09]. ℓ_q [WPY23, LW11a]. ϵ [BBR16, BPT97]. F [MS11c, MP97]. K [DK22, PW07, PH18, SM93, BHKM14, BDSS22, CJ18, DV16, WDST14, Zha20]. $K_{m,n}$ [dKP12]. K_n [dKP12]. L [ZN09]. L^1 [CHW12]. l_1 [MU14, BL93, LS98a, MN93]. L_p [JLW16, Las16, Li93b]. LDL^T [RB18]. M [HMW21, MST11, LS98a]. Z^n [LM20a]. $\mathcal{O}(\infty/\ \cdot \)$ [MOP20]. \mathcal{U} [Har14]. \mathcal{YU} [Har14]. n [Loc15]. $N - k$ [BV10]. ∇u [Cel07]. $\mathcal{O}(1)$ [Xu22]. $\mathcal{O}(1/k^2)$ [Mis23]. $\mathcal{O}(1/t)$ [TY12, YN17, Nem04]. $\mathcal{O}([n^3/\ln n]L)$ [Ans99]. $\mathcal{O}(\epsilon^{-3/2})$ [GJT23]. $\mathcal{O}(n)$ [Roo15, Roo06]. $\mathcal{O}(n^2)$ [XXS21]. $\mathcal{O}(n^3L)$ [McS96]. $\mathcal{O}(n \log \text{Tr}(X^0 S^0) \epsilon)$ [LT10b].</p>
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$O(\sqrt[p]{L})$ [AZ05, GT92, HY96, McS94]. P [CX08, SM18, XY00]. $p > 1$ [SM18]. P_* [PS97]. $P_*(\kappa)$ [DIPR20, IPRT00, LR10]. P_0 [CC99, CY00, Qi99, RG00, ZL03]. Ψ [GL08b]. R_0 [CC99, FCF07]. σ [RZ01]. T [Chu03, Chu09, RQMG12]. θ [SS22]. u [Cel07, Ous99]. ε [RW07]. φ [YZZ17]. VU [MS00]. $X^{1/2}SX^{1/2}$ [LM04]. Z [MN96].

-Algebraic [Chu09]. **-Algebras** [Chu03]. **-approximate** [RW07]. **-balls** [Las16]. **-best** [SM93]. **-Block** [STY15]. **-Convex** [JMW08, MST11]. **-Coordinate** [Cri22]. **-Decomposition** [Har14]. **-Dimensional** [BHKM14, Loc15]. **-estimator** [LS98a]. **-Functions** [BDS10, Qi99, RG00]. **-Gradient** [Har14]. **-Hessian** [Har14]. **-Iteration** [HY96, GT92, McS94]. **-Lagrangian** [Ous99]. **-Linear** [DIPR20, LR10]. **-Linearization** [RQMG12]. **-Locally** [BDSS22]. **-lower** [MLRR93]. **-matching** [Ris94]. **-matchings** [HL11]. **-Matrix** [CX08, MN96, PS97]. **-Means** [DK22, PH18]. **-means-type** [PW07]. **-Median** [CCFP05]. **-Minimization** [HYZ08, ZL12]. **-Monotonicity** [MP97]. **-Norm** [DV14, DV16, Lin08, SM18, TQP22, WLS23, WDST14, WPY23, XFLP21, ZL02, JLW16]. **-Norms** [XY00]. **-Number** [SS22]. **-Optimization** [MU14]. **-processor** [GR94]. **-Projection** [Tse98]. **-Regression** [GP04]. **-Regular** [YZZ17]. **-Regularity** [IS02b]. **-Regularized** [CCR17, DLR16, KV17]. **-Relaxation** [BPT97]. **-Slope** [BHKM14]. **-Stationarity** [HMW21]. **-Stationary** [FT07]. **-Subgradient** [BBR16]. **-Subsmooth** [ZN09]. **-theory** [MS00]. **-Thresholding** [Zha20]. **-triangulation** [Dan93]. **-Type** [STY15].

/Pseudo [BYZ19].

1 [BLMH06]. **1-Restricted** [HL08a].

2-Matchings [HL08a]. **2-Page** [dKP12]. **2001e** [QW01].

3-Way [DO06].

97a [ZT98]. **99k** [MZ00].

Abadie [Li97, SYZ19]. **ABCD** [STY16]. **Abcissa** [GO12, VVM⁺09]. **Absence** [AI20, DLV10, JL23]. **Abstract** [Ber17, BR07, CT12, Gfr07, IK14, LN14a, LN18, NY02, Och19]. **Accelerate** [JLZ20]. **Accelerated** [ALR03, AP16, AFGO20, CC19, CGRV21b, CDHS18, DJ93, Far20, FR15, GDG22, GN19, HM16, JST12, KMM19, KM21b, KMM23, KBGY22, LY19, LM21a, LLX15, LX23, LM23, MS14, NS17, RFNP14, VSBV14, Wri12, Xu17, ZW18]. **Accelerating** [HM15, RCGR18, YM14]. **Acceleration** [ADR19, CMV19, CDR22, IH14, LS13, LMH19, NN91b, Rd20, SJM21, ZOB20]. **Accuracy** [CGT19, SSSZ10]. **Accurate** [FFK98a, XA18b]. **Achieving** [NOS17]. **Acoustics** [Hab98]. **Acting** [vAPA19]. **Action** [GXZ21, ZC91]. **Actions** [HN19]. **Active** [BHJK00, BM18c, BRZ20, BDL⁺16, CWH06, Cri22, CH16, DIS04, DLR16, EI06, FFK98a, FJS98, FT02, FT07, GLT03, GL15, HZ06a, HIK03, HR15, IS08, JKW15, KR02, KR03, Lew02, LT10a, OW06, SZY16, ZC20]. **Active-Set** [Cri22, CH16, DIS04, FT02, FT07, GL15, IS08, JKW15, SZY16, BM18c]. **Activity** [LW11b, LFP17]. **Actor** [HWWY23]. **Actor-Critic** [HWWY23]. **Actual** [WLZY07]. **Actually** [AP16]. **Acyclic** [DK18]. **ADAM** [BB21]. **Adapted** [NT19]. **Adaptive** [AA06, AABL21, AD06, ACD08, ADL08, AILT14, ALT19, AH16, BGMT19, BB19, BBN18, BD09, CMYZ22, CJSY07, CBJF97, CNQ97, DP19, Don16, DFS03, Eic09, FS08, GN23, JLZ20, LR21b, MWDS18, NWW09, OP19, PS21a, PW06, RC22, RPK03, SHP18, SV07, SY13, SL15,

SAW99, SZ98, Tse98, YKI04, ZU11, Zie14].

Adaptive-Mode [SZ98]. **Adaptivity** [AD19, LJ20]. **Additive** [Cap02, Qi16].

Adjoint [DSD12]. **Adjoint-Based** [DSD12].

Adjoints [LSW20]. **Adjustable** [BLRS22].

Adjusted [AH05, CCM20, LLS05].

Adjusting [FIS20]. **Admissible** [ZZ16].

ADMM [AH19, BK21b, BAR21, GMM17, LST16, LMZ15, TP20, ZW18]. **ADMM-like** [AH19]. **ADMM-Type** [BK21b]. **Affected** [BTN02]. **Affine** [BM16a, CCM23, CB00, CG17, GLHZ11, JRT97, LRZ21, LL23, MT98, Peñ23, Pot08, Rob07, She14, dGJ18, GT92, LT92, Mas97, MW96, RV93, TM95].

Affine-Invariant [dGJ18]. **Affine-Scaling** [GLHZ11]. **Affinely** [BLRS22, ZWHZ23].

AFPTAS [EL10]. **Agents** [LdF08, RTM23].

Aggregated [GOP17, VGO18].

aggregation [Gar93]. **Aggregations** [DMS22]. **Ahead** [HN05]. **Alem** [EA99].

ALESQP [AKR23]. **Algebra** [BZ04].

Algebraic [Bar08, Chu09, CP17, Fay06, FFG99, GE14, HU19, Las05, LP10, Mat05, NR09, Pha20, RFB⁺11]. **Algebras** [Chu03, GJ17, LT20, PA14, RSS14, See22].

Algorithm [ATP21, Alv04, AF01, Ani02, AGJJ00, AV20, APR14, ADL08, ALT19, AD15, BK21a, BB21, BBW05, BC05, BM16a, BD17, BM20a, BCS21, Bia16, Bil02, BW02, BKT99b, BRZ20, BP97, BLY14, BCH14, BCN19, BAD18, BAR21, BDPP14, BD09, BI98, BLO05, BCW14, BHN99, Cab05, CCS10, CCFP05, Car22, CJSY07, CCM20, CCM23, CB00, Cas00, CERS18, CYZ22, CMY15, CCR17, CL14, CH15, CP08, CG17, CC02, CGST96a, CY14, CR04, CP01b, CNW10, CO12b, CJRW14, CRS18, CWZ18, Dai02, DK13, DP19, DIPR20, DLR16, DT98, DK10, FS97, FJS98, FLP02, Fay96, FB19, FLT02, FGL⁺02, Fle12, FS08, FV99, FQ96, FT02, FT07, GS21, GH16, GMS02, GHZ99, GT97a, GT97b, GKR14, GLT04, GJT23, GE14, GY20, HZ06a, HP09, HA21, HL98, HW10].

Algorithm [HM16, HBM21, HH06, HK09, HL17, HL20, HWWY23, HU17, HFD16, HY96, HOR99, Iid12, IPS03, IS02a, Jan06, JL20, KT03, Kel99, KF18a, KT14, Kiw07a, Kiw10, KSS99, KRZ17, KCS97, Kuč08a, KJ17, LPW12, LNP98, LMT09, LT01, Lev04, LT02, LS97b, LMH19, LS04, LWZ15, LR21b, LLS06, LL09, LM05, LMO06, LY07, LPS05, LM20c, LS98b, LSZ98, MN09, MNP96, MNP98, MWDS18, MP18, McS96, MÖ10, MP14a, Men17, MIM20, Mit00, Mon23, MT98, MT03, MT04, MPR10, MST11, NL14, NLQT06, NYZ18, NE19, Pan05, PRRL97, PTZ05, PCA19, PW17, PS98, Pyt98, QQ00, RK19, RW21, RSS00, Roo06, RN98, Sal17, SD00, SKM19, SE99, Sch98, SZY16, SP97, SLWY15, SXBN22, Sim11, SY18, SP12, SKL09b, TF96, TA98, TE19, TDKC14, VJFC18, VJM16, WST10, WLWY15].

Algorithm [WX17, WX19, WP23, WCP17, WT04, Wri05, XS99, XY97, XY00, YF00, YST14, YT22, YN17, ZCS10, ZZST20, ZL03, ZLCL21, ZT98, dE14, Ans91, AB95, BMR94, Ber91, BF96, BKT99a, BD93, Bos93, BTZ92, CT93, CH93b, CL92, DvTY91, DL91, EA95, Fre95, GK95a, GV94, GLW91, GT92, KN93, Lag93, Li93a, MN93, Man91, Mas97, MPW95, MW96, MP95, NS91, PR93, PY93, Pot96, RV93, Ser95, Tod92, Tor91, Tse91, TM95, Wri92, Ye92, ZT93, ZT96, Zhu95, dRV92].

Algorithmic [AMS10, AMRS16, AHSS19, AFSS19, AO06, CM16, DLM21, GLCxY18, GL12].

Algorithms [AA20, AKS00, ABGJ14, ATU23, ARS07, AC18, AL20, AD00, AD06, ACD08, AILT14, BER04, BGN22, BHM18a, BWW12, BSW23, BE14, BGMT19, BDMS09, BGG⁺12, BB19, BMSS19, BPR20, BCLN22, BKR17, BGNW05, CGT12, CH02, CODL22, Chr20, Chu09, Com14, CGST96b, CVV99, CSV09, Dai06, DSK20, DP00, DHL15, DKS22, DV97, DEAM97, EA99, FRMP18, Fle01, GPR02, GL12, GL14a, Gha23, GLRS15, GM12b,

Gon99, GOST01, GSW97, GOP17, HSS17, HV01, HNE16, HL14, HL08c, HHY18, HZ06b, HLY16, HZ22, Iid13, IH14, IS02c, JRT97, JLW16, JL19, KP22, Kor00, KNS11, KBGY22, LY19, LYSA20, LS13, LRP16, LT99, LT10b, LBT22, LZ19, MP97, MÖ09, Mia96, MCB09, MN96, Mon97, MT99, MS13, MS21, MW09, MARS10, Mur03, MKU21, NARS14, PC08, Pan19]. **Algorithms** [PLS08, Pat98, PRS16, PQS01, PW06, PTJY10, Pul00, RNV09, Ric11, RFNP14, RW18, SPT08, Sat22, ST10, SHP18, SSK98, SPM18, Sol98, SJM21, SVD14, Teb97, TSP18, THDL22, Tor97, TDZ20, ULC20, VSBV14, WUR⁺23, WLLY16, WWLY21, WLN23, WS11, Wri99, XD20, Yil08, Yin99, YLZ02, YKI04, ZYP21, Zha98a, ZK14, ZSX19, ZAL21, ZL22b, ZHE23a, Zha98b, Zha20, ZLTD22, dGJ18, BT94a, BS94, CGST93, Dan93, Dix91, Eck94, Gül92, IKR⁺91, JY94, JSV91, KKM93, LT92, LT93, McS94, MTT94, MKT95, Mon98, Naz91, PQ93, Qi95, ZC91, ZTD92, ZTP93, ZR93, Zhu96]. **Alizadeh** [KSS99, LM05]. **all-inclusive** [WZ95]. **Allocation** [BBG⁺20, Ete20, HS23, Iid12, LdF08, VJM16]. **allowing** [AW94, Ye92]. **Almost** [Cri22, Fus14, GW21, Xu22]. **Also** [Las04]. **Alternating** [AAJN16, ARS07, Bec15, BBCS21, Bol14, BB23, BSR17, CS08a, Chu21b, DKL21, DP23, GMSS17, HTY12, HLR16, KRR99, LLAN22, MS13, NT19, STY15, TY12, Tse97a, WLS23, YPC18, ZL20]. **Alternative** [JLL09, Mut01]. **Always** [Ros14]. **AM** [MNR⁺22]. **AM/GM** [MNR⁺22]. **AM/GM-Based** [MNR⁺22]. **Ambiguity** [NJS21, RG22, RR15, RW17]. **Ambiguous** [Cal07, ZJS18]. **Amenable** [LRS22]. **Ample** [DR01]. **Analyses** [CM16, MTB23, Sat22]. **Analysis** [AB18, AWW09, AZ19, ASSS23, AD03, ABDL21, AC02, BGY⁺23, BCS21, BDMS09, BT19, BH96, BLY14, BLT17, BKS96, CLMP10a, CLMP10b, Cap02, CHW12, CT12, CQT03, CJ18, CSS19, CCN⁺18, CRS18, Dav15b, Dav15a, DGT20, DMZ12, DR07, DKLM22, DV23, EW09, EH20, FMP18, Far20, FRMP18, GY17, GM17, GM19, GLY96, GG08, Gon14, GZ17, Gre00, Gui16, GLY12, GLYZ14, GXZ17, HL98, HS21, HLZ08, Har14, HKP18, HV01, HMN10, Her09, HS11, HLR16, HWWY23, JFX17, KKT20, KL10, Kor00, KNS11, LR10, LRP16, LP08, LN11a, LN18, LM20a, LL23, LSS22, LXL11, LRX14, Lov11, LJ16, Luc09, LM20c, Luo97, Mal07, MPP⁺17, MM21, MO07b, Mor07, MOR15, NA20, NC16, NO09, PS20, PMDL10, RHL14, RW18, Roy20, SBD⁺11, See97, Sen07, ST14, SKB18, SW07]. **Analysis** [Wal08, WHY⁺19, WWLY21, WLS23, XB99, XBN20, YT02, YNS20, YPL21, Zas13, ZYP21, ZML21, ZXZ16, ZL22a, ZN05, ZW12b, ZN14b, ZN21, dF09, dKLS15, BKT99a, BT96, CT93, Iof94, JY94, Lew96, LT92, MS94b, SZ92, Zhu96]. **Analytic** [Abs05, Ded00, GV00, GT97a, GLTP98, Hol04, Kiw97, Luo97, LS98b, LB00, MG98, NV99, OG03, TZS02, XLZH19, dRT92]. **Anderson** [ZOB20]. **Angular** [CN17, MZ99, SM91]. **Anisotropic** [FHPS22]. **Annealing** [CF99, Fie00, Nau02, Fox95]. **ANOVA** [TLT⁺18]. **Ansatz** [JS11]. **Any** [PW19]. **Aperture** [RADK05]. **Application** [AD10, ANRV04, Ans17, ALSV18, AD15, BNL⁺18, Bet19, BGG⁺12, BH96, Ceg15, CDM20, DRT17, FGM17, Gfr14, GLHZ11, Gor22, GKT23, GF08, HWWY23, HU19, Iid12, KGM23, LLX15, LW08, LSF⁺23, Mai15, MP14a, NT08, NMU18, QW00, QW01, Qi16, RCGR18, RW12, SKC12, SY13, SKL09b, TMHP06, WWLY21, Wu96, YKI04, YCST22, ZH04, ZC09, ZL22a, ZL01, vAS14, CLMS93, IK96, DHLN92, ZÁC17]. **Applications** [ANT16, AHSS12, BBLZ17, Bec15,

BTMN01, BDL07, BSTV18, BH14b, Cab05, Car23, CGT11, CT02, CRZ18, CERS18, CQT03, CSW12, CHN18, Chu21b, CKS17, Com14, CVV99, DMZ12, DLV10, DMVV17, DPS17, EL09, ESKL18, FK00, FBM15, FBO21, Fus14, GH16, GLT03, GZ17, GLY12, GNRPT16, HJB20, Har98, HMN10, HSK15, HLY16, HY02, HYY16, IK14, JBS⁺23, JPT13, JY04, JL16, JW14, JS20, Kan14, KB08, LLD⁺02, LNP08, LM12, LZH14, LM20a, LST21, LFN18, Luc09, MS20, MM21, MS11c, MO01, MTZ03, MO07b, MR12, MN13, MN14, MOR15, PAV21, PW05, RM08, RFB⁺11, RGY99, She14, SSQ04, Ulb01, WLM22, XS99, XYZ15, XLZH19, XY97, YmZS15, YFHS16, ZY07, ZN14a, ZN14b, Zhu02, vdLTY06, Ali95, AEGS93, ACC93, CSY23, Den00, Tha94, Tha93].

Applied [BBW05, BSW23, BLY14, CBJF97, GMS21, Hab98, ISU12, HH06, JSV91].

Applying [MPR10, SK98]. **Approach** [AAS17, ASNP16, AT03, Ani05a, ACB20, ALSV18, APR14, BQX15, BP05, BCWP21, BEET12, CT06, CP18, CGO22, Chu09, DKL21, DLR14, DEAW99, DYC⁺21, DMVV17, FLLR14, Fay06, FLS03, GSU21, GHKL17, GV14, GJN06, HLZ08, HKK11, HNKK17, HXLT23, KU15, Las10, LM18, LP15a, LFW98, LLR16, Lu09, LA08, MPB02, MST11, MTB23, MGGS09, NJLS09, Nol98, PFA17, PR07b, PC03, Ram18, RQMG12, RADK05, SS23, SI13, Sch08, SL15, ST09, Tse99, TP02, WZYB08, Wu96, WZZ18, Xu06, XC21, YH01, YB16, YP20, YT02, YLZ02, AEGS93, CL96a, Iof94, TYF96, Wan95].

Approaches [Ani05b, Kau99, KM21a, Tuy00, YZ10, dKL10]. **Appropriate** [DHML01]. **Approximability** [Ete20].

Approximate [ABCFR20, AD19, BM07, CCFP05, Ded00, DO19b, DYC⁺21, ESKL18, Fil99, GLN07, GKPV01, GJN06, GHNS19, HS19, Kiw04, Kiw06, Kiw08, KS05b, LFKCT23, LN14a, LJ16, NO09, SZ14, ULC20, XFLP21, dF09, d'A08, RW07].

Approximately [CMYZ22, DV14].

Approximating [AP22, Erg19, GdW00, HHJL23, IPS11, Onn94, PW07, SCRS00, Tse03].

Approximation [AMHL05, ATU23, AST10, ABP18, BY11, BZ08, BV18b, BV21, BD09, CSS19, CS22, CLYZ22, CST19, DLW99, Don14, EL14, EN14, GHK17, GLRW21, GHKL17, GL12, GL14a, GRW20, GL10, GXZ21, HLL98, HL08c, HCH20, Jan06, JLZ20, KdK23, KSdM01, KT08, KS15, LY98, LL22, Las05, Las06b, LB18, LN02, LJ02, LN03, LX14, Liu20, LR21b, LZ14, LA08, Luk08, LSTZ07, MX06, MU20, MBW09, NJLS09, Pan16, PS21a, Pat98, POLW20, RP23, RSvdVH16, SB18, Vil05, XHL14, YKI04, dP02, DJ93, GK94].

Approximations [ACN15, ACS14, AFGG11, BK12, BTN02, CCL09, CH97, CWZ12, DFR07, GY23, Gür10, Har14, INT17, JHR23, JL05, KM21a, KTSB21, LMMZ21, LWZ15, Lov11, MP16, MHL15, MP07, NS07, RvdVH15, RPK03, SdM00, Sva02, ZVP06]. **Arbitrary** [CGT20, CERS18, PA19, BF96].

Arbitrary-Order [CGT20]. **Arc** [Pul97].

architectures [AM94]. **Arising** [FV07, FGG07, GMO14, SDGM99, VZQD17, GMS92, JYZ94, PR93, dCST15].

Arithmetic [Wri01]. **Armijo** [Cri22].

Array [Che01]. **Ascending** [BBTT12, PS10a]. **Ascent** [Gha23].

Aspects [FWKS15, LS97a]. **Asplund** [BW07, NT02]. **Assessments** [GC23].

Assets [BCM03]. **Assignment** [Ans00, MP10, PRRL97, BCT93, PR93].

Associated [CDZ17, GHR14, LM04, MP10, ZL01, ZW12a]. **Assuming** [EA99].

Assumptions [Sal17, Di96]. **ASTRO** [SHP18]. **Asymmetric** [RFNP14].

Asymptotic [BC09, BNT04, BKMW20, Cha02, FB03, LS20, Tüt03, YNS20, Zhu96].

Asymptotical [HY96]. **Asymptotically** [Li10, LST20]. **Asymptotics** [WZZ18].

Asynchronous

[CCT21, FH14, KPZ19, KT04, Kol05, LW15, MPP⁺17, Pan19, Tse91]. **Attacks**

[BLMH06]. **Attouch** [ABW21]. **Aubin**

[OOR17, OR11]. **Auction**

[DP00, Ber91, BCT93]. **Augmentation**

[DHL15, DKS22]. **Augmented** [ABMS08, ASS18, AW00, AKR23, AI12, BR07, CT06, CGST96a, DL01, DFS03, FS12, FGG07, GAD20, HS21, HHY15, HLP23, HFD16, IK96, ISU12, JR08, KS16a, KS19, KMM23, LT02, LST18a, LST20, LZCW23, LST21, LZ23b, LSL08, NTA04, SFMF20, Sta04, SLM05, Toh03, WDLW23, ZST10, BTZ92].

Aumann [FBH22]. **Autoencoders**

[LLC22]. **Automated** [MS11a]. **Automatic**

[BC05, LN93, MN00, Dix91]. **Auxiliary**

[BCCL22, Nes21]. **AVaR** [Den14]. **Average**

[BBMW16, BGLW08, CWZ12, CSS19, CWP20, CC14, EN14, GY23, GS01, Har09, HCH20, HG16, KSdM01, LL22, LM21a, Liu20, MX06, NMU18, PS21a, Wan11, WB22].

Averaged [BLT17]. **Averages**

[BWW12]. **Averaging**

[DFR18, Ete22, NL14]. **Averse**

[BCD20, FWKS15, GSU21, Gui16, KS16b, LZ23a, MP19, GKS18].

Aversion [ST03].

Aware [KP22]. **Away** [BRZ20, PRS16].

Away-Step [BRZ20].

B [FT02]. **B-Stationary** [FT02]. **Back**

[HTY12]. **Backtracking** [CC19].

Backward [ATP21, ACP11a, APR14, AP16, AC18, AD15, BFO19, BPR20, BAD18, Gis21, LFP17, MT20, RW21, Sal17, TSP18, VSBV14, CR97].

Backward-type [LFP17].

Bad [Pat17]. **balance** [Fre95]. **Ball**

[AY08, AL21, ADR22, Lim11, MLC22, SZY16, WX16, Yil08].

Ball-Constrained

[WX16]. **Ball/Sphere** [SZY16]. **Balls**

[AST10, Gar21, LTY12, Las16, Mar94].

Banach

[BP07, BCCL22, BKMW20, CT03, Den97, DGLM14, DFR07, DS12, GW21, GYZ14,

HS06, HSK15, Hu07, HK92, Iof94, KT03,

KKSW19, KS19, KRS11, KT08, KNT10,

LPT07, LN03, LN05a, LN14b, LN18, RZ01,

Sab11, TZ10, ZN04, ZN05, ZN07a, ZN07b,

ZN08, ZN09, ZN10, ZN11, ZN14b, Zhu02].

Bandit [AFH⁺13]. **Bandwidth** [Iid12].

Barrier

[AD09, Aus99, BER03, BTZ97, BMSS19,

CL14, FG04a, GKR20, Gül97, HL23b,

MÖ10, MSS15, NWW09, Ren96, Sch09,

SW11, SOT09, YY03, And96a, GLW91,

Mel96, MW94, Pow95, Wri95, Gon91a].

Barrier-Based [CL14]. **Barriers**

[FS23, Fay02, HL02, Mit94]. **Barzilai**

[CPRZ20, HDL21, Ray97]. **Based**

[AZ05, ABCFR20, BER03, BSV14, Bil02,

Bla21, BLPP16, BCS99, BKMW20, BHP23,

BR19b, BLS21, CX99, Chr20, CL14, CP01a,

DIPR20, DD19, DV97, DEAM97, DL22,

DJ21, DW22, DSD12, DFR18, FLLR14,

Fle98, FV16, FHPS22, FV99, Gfr14, GV15,

GG08, Gon99, GRVZ15, GR12, Gui16,

HPD14, HL23b, HLP23, HSW14, HSK15,

HNKK17, HR22, HFD16, HS17, IdW16,

IJOT19, IS10, JKW15, Kal18, KMM23,

KCS97, Lau01, LJ20, LR10, LZ03, LP15c,

LM05, LMO06, LS98b, Man04, ML05,

MÖ07a, Men17, MLLB08, MCB09, MP10,

MNR⁺22, NJS21, PRRL97, PGGH18, Pat16,

PMR19, POLW20, PRT02, PTZ05, QWY04,

QCLP19, RG22, RQMG12, ST22, ST10,

SSW16, SK06, ST14, SM18, SL15, SVD14,

SSD22, Sva02, YP20, YL11, ZYP21, Zha98b,

ZLCL21, dKLS15, AH16, CM11, JY94].

based [Mon98, BHHK00, NE19]. **Bases**

[CP08, Spa14]. **Basic**

[BGLW08, BLY14, JPT13, KS18, LJ02].

Basins [LDS22]. **Basis**

[KKS03, SW07, WS11]. **Batch**

[CKL97, DR23]. **Bayesian** [GXZ21, JHR23,

SS23, SZL23, TPF22, WZZ18]. **BCQ**

[LNYZ21]. **Be** [BS19, XXS21, Lau94, Wri95].

Beats [Bom15]. **Behaved** [Li10]. **Behavior**

[Abr05, BB21, BM20a, BCGH08, CB00,

DIL16, GHNS19, LM04, NF01, Tüt03, BLN92]. **Belief** [HHP18, HP18]. **Beliefs** [DG20]. **Benchmarking** [MW09]. **Bend** [MW06]. **Benders** [RCGR18, WA15, ZPR00]. **Benefit** [LDS22]. **Benson** [Qiu08]. **Best** [BQX15, CCM20, CCM23, CU99, CST19, DLW99, LS22, LN02, LJ02, LN03, Luk08, Pan16, Pot14, BL91, SM93]. **Best-Response** [LS22]. **Between** [Bac15, BGV20, EF02, INT15, AP14, BO17, HLB20, HN07, HHJL23, LH02, SZ14, WX20a, Zha96]. **Beyond** [BSTV18, DHL15, ZMB⁺20]. **BFGS** [AGJJ00, BB19, BTZ92, Dai02, GG18a, GL18, HAG18, KON98, LF01, NN91a, XBN20, YMT04, ZC10]. **Bi** [LCPS20]. **Bi-parameterized** [LCPS20]. **Bias** [DL22]. **Bicriterion** [CJK98]. **Bidirected** [DW11]. **Bienstock** [Mas20]. **Bifunctions** [JW14, KQ19]. **Bifurcations** [RM08]. **Bilevel** [AAS17, BDM16, BM16b, BNL⁺16, BCD20, CCLW14, Chr20, DKL21, DGJ09, DMZ12, DZ14, DKM18, HWWY23, HXL23, JLLP16, KYYZ22, LSS19, NWY17, NWYZ21, SS17, SS23, Sol07, WX17, WTKR13, XYZ15, YK18, YZZ97, Ye04, YZ10, ZZ96]. **Bilinear** [BFS16, DRT17, GACD14, MSG20]. **Bin** [EL08, EL10]. **Binary** [BHM18a, BT00a, BMZ01, BV06, GVA11, GdW00, KL10, NST18, Pap16, STKI17, XHL14, ZJS18, ZT92]. **Biobjective** [hRK14]. **Biological** [BLMH06]. **bipartite** [Gro95, RV93]. **Biquadratic** [LNQY10]. **Bisection** [SM99, PR95]. **Bivariate** [MN09]. **Black** [LLRV19, Vav93]. **Black-Box** [LLRV19, Vav93]. **Blackbox** [ABK22]. **Blackboxes** [AABL21]. **Bland** [DHL15]. **Block** [BT14, BPS15, BDL23, CN17, CH02, CHLZ12, CP15, DL15, DLR16, GG18a, GK96, GL08a, HM15, HY15, LLZ23, LUZ15, Lu17, MZ99, MN96, MS13, NT19, Och19, RHL14, SBT16, SY19, STY15, Wri12, XY15, Xu18, GMR91, SM91, ZWHZ23]. **Block-Angular** [CN17, MZ99]. **Block-Coordinate** [CP15, Wri12]. **Block-Decomposition** [HM15, MS13]. **Block-Diagonal** [GK96, GMR91]. **Block-Diagonalization** [GL08a]. **Block-Iterative** [CH02]. **Block-Regularized** [NT19]. **Block-Separable** [SBT16]. **Blocks** [BFM98, GK94]. **Bodies** [GPT10, LRO05, TP02]. **Body** [dCST15]. **Boltzmann** [BH95]. **Boosted** [AV20]. **Boosting** [LM20b]. **Bordered** [GK96]. **Borwein** [BWY10, CPRZ20, HDL21, Ray97]. **Both** [ZZN18]. **Bound** [AKS00, BJ22, BBCS21, FL98, GJT23, HP09, KLLM22, LT99, Li10, LM99, MNP98, uDR15, MT04, PRRL97, RvdVH15, RSvdVH16, Ulb01, Vui14, YZS19, ZL22a, BT96, Eck94, Lau94, Li96, LT92, LT93, LL94, MT91, NE19]. **Bound-Based** [NE19]. **Bound-Constrained** [KLLM22, LM99, uDR15, Ulb01]. **Boundary** [DD98, ET07, GTdS06, KS99, Man99, SKR16]. **Bounded** [CCM23, CWP20, DGR17, DK10, FLP19, FPT22, KTSB21, LLAN22, MGS09, PH23, Phu10, Shi18, LS93]. **Boundedness** [MOT04]. **Bounding** [Cap02, HP07, SÖ17]. **Bounds** [AMS16, Ans00, BNT04, BDDM19, BCD⁺18a, Bom15, BHS15, CGT20, CX08, CR23, CCT21, CL96b, CL23, CPRZ20, Den97, DFS03, DdLM21, ESKL18, FL98, GM12a, GMO14, GL08a, HS06, HLNZ08, Hu07, HN04, HR15, IdW16, Jan04, KNT10, KR03, LL22, LCC⁺20, LT02, Li97, LN09, LM04, LSTZ07, MMN⁺22, MP16, MP19, MLLB08, MP10, NST18, NC16, NZ01, NY02, NY05, NT08, NKT10, Nga15, NF01, PARN22, Pen19, PM15, Pyt98, Son06, SWW21, Stu00, WY01, WY03, Yan09, YK18, Zha00, ZN05, ZW12b, ZB18, dKL10, dKP12, dKHL17, dSTVB18, CH93b, CL96a].

Box [BL09, Dos97, FJS98, FLP02, HZ06a, LLRV19, Qi99, RG00, SW99, XSLZ11, dKHL17, FM94b, MMZ95, Vav93].
Box-Constrained [dKHL17, MMZ95].
Boyle [PB17]. **Branch** [AKS00, FL98, HP09, PRRL97, Pfe08, Eck94, Lau94, NE19].
Branch-And-Bound [FL98, AKS00, PRRL97, Eck94].
Branch-and-Cut [Pfe08]. **Branching** [NRS21]. **Breakdown** [GP04]. **Breaking** [HN19]. **Breakpoint** [Cap02]. **Bregman** [ATP21, BC03, BDL18, BDL21, CH02, CT93, Ius91, LTAP22, WB22, YT22].
Bridge [SZ14]. **Bridging** [HHJL23].
Broadcast [IH14]. **Broyden** [YMT04, BLN92, HGA15, HK92, KS91, KS93, O'L95, YY95, ZCD00].
Broyden-Like [ZCD00, YY95]. **Budget** [LY98]. **Budget-Dependent** [LY98].
Buffered [MU18]. **Bundle** [ANP08, AFFG14, ASSS23, BR19b, DSS09, DG23a, DG23b, FK00, FH14, Fra02, HS10, HR00, JBK⁺18, KPZ19, Kiw06, Kiw07b, LM21b, MSQ98, Mon23, OSS11, SS05, SSN04, Sol07, vAS14, vAF18, Kiw96, SZ92].
Bundle-Trust-Region [KPZ19].
Bundle-Type [MSQ98]. **Burer** [WW20].
Burmeister [BPC11].

Calculation [FG04a]. **calculations** [Dun93]. **Calculus** [BFO19, CD00, CHL16, EL09, HLZ08, HJB20, LN11a, MR12, PW05].
Calm [Lev00]. **Calmness** [CCP22, CKL⁺14, DSZ17, Gfr11, GCPT18, HJO02, HJ02, KYYZ22, SYZ19, Son06, ZN09, ZN10].
Campoy [BSW23]. **Can** [ABGJ14, BS19, Gor22, HN05, Lau94, XXS21, Xu22].
Canonical [BV18b, CKLP07, SVD14].
Capacitated [AKT17]. **Cardinality** [BKS16, HL11, NMU18, RSKW19].
Cardinality-Constrained [RSKW19].
Carlo [SdM00, VV21]. **Case** [ACB20, BTKNZ99, BC14, BLMH06, BR08, Cap02, CGT20, CW23, DGT20, FB00, GJV16, Gfr07, THG17, VJFC18, Tha93].
Castaing [Den00]. **CAT** [DP23]. **Cauchy** [ZNW99]. **Causal** [BBLZ17]. **Caveats** [ACB20]. **CDFs** [HXH22]. **CDT** [AZ09, Bie16, SNTI16]. **Celis** [CY99, CL23, YWAS17]. **Center** [GV00, GT97a, GLTP98, Hol04, Kiw97, Luo97, LS98b, LB00, MG98, NV99, OG03, TZS02, dRT92]. **Centerpoints** [BO17].
Centers [BR19b, Chu06, Kiw08, LT96]. **Central** [Gon99, GKS18, Hdr02, LP06b, NF01, Pot14, QLSZ18, Zha98b, KN93].
Certain [PZ98]. **Certainty** [WX22].
Certificates [And00, DP22]. **Certifying** [JL23]. **CG** [CRRW21, HL23b, HLP23, WST10, ZST10].
Chain [BCU00, BM98a, BDPX09, DS12].
Chains [AH16, Sau20]. **Chance** [CSW12, CWZ18, GHKL17, GXZ17, JHR23, JAL15, NS07, POLW20, RP23, SFM14, TSR22, WK19, XA18a, ZJS18, vAS14].
Chance-Constrained [CSW12, POLW20, RP23, ZJS18]. **Change** [HL98, LV08, WZ95]. **Chaotic** [CB00].
Characterization [AP14, CHN18, CHPA16, DSZ17, PA14, Qiu08, RS11, Win08, Tha93].
Characterizations [BJ22, BGM19, CGT10b, DSST20, DR96, Gfr11, GM15, Hu07, JL10, JJ15, MRS14, GIJT96].
Characterizing [FBM15, FBO21, Jey03, JLD03, WG19, ZT92]. **Charge** [AKT17].
Cheaper [Nau02]. **Chebyshev** [FI08, Fay02, FG04a]. **Chemical** [BLMH06, JSC95]. **Chemical/Biological** [BLMH06]. **Chemistry** [XS99]. **Chen** [CX99]. **Chervonenkis** [LL22]. **Chinese** [SM93]. **CHIP** [ET07, LJ02, LN03, LN05b, LNP07, LN14b].
Choice [HXH22, IK92]. **Cholesky** [SE99, Wri99]. **Chordal** [WML21a, WML21a]. **Chordal-TSSOS** [WML21a]. **Christoffel** [Slo22]. **Chromatic** [GL08a, GL08b]. **Chvátal** [AL14, Mas20].
Circle [BP12]. **Circles** [MC05]. **Circuit**

[DKS22]. **Circuit-Augmentation** [DKS22]. **Circuits** [GLM98, LL00]. **Circulant** [Dah99]. **Circular** [HL06]. **Clarke** [BDLS07, DF19, JBK⁺18]. **Class** [ASNP16, ABCFR20, Ani05a, ARS07, AST10, BPL12, BT21, BR23b, BTT96, Ber97, BDL23, BU22, CODL22, CB14, CLO14, CLP16, CH17, Chr20, Chu18, CS15, Dah99, DLM21, DIS04, Dax09, DLR14, DSZ17, EA99, GAP08, Gfr13, GST11, GER23, HM16, HJO02, HK06, HL17, HL20, HM02, HF14, HGA15, Ios01, IK00, IK16, KR02, Lau00, LM02, LT10b, LBT22, LH04, LZ03, LZ19, MG98, PC08, PT18, PLS08, PS10b, Pul00, QP23, QY14, SU14, SA04, SHP18, SW14, Sol07, Sta99, SH97, Sva02, WA15, WCP17, Xu06, XLZH19, YFHS16, YPC18, Yin99, YPL21, YL11, ZML21, ZX99, ZL22b, ZHE23a, ZCT10, ZLTD22, BT94b, BLN92, CGST93, DL91, MS94a, Sar95, ZTP93, Zha94b, dRT92]. **Classes** [CN17, CHLZ17, LX23, LBP20, PR07a]. **Classical** [BT04, Di96, KMM23, TP16]. **Classification** [Sch92]. **Clique** [BMP22, MPB02]. **Closed** [CL14, DLW99, JPT13, KS18, Las11, LN05b, LNP07, Rut17, SYZ19, ZN11, Zhe20]. **Closed-Form** [Rut17]. **Closing** [WX20a]. **Closure** [DG09, GVJS10]. **Closures** [DGR17]. **Clouds** [CKS15]. **Cluster** [BH96, PM15]. **Clustered** [LLST19]. **Clustering** [DK22, PW07, PH18, PM15, RSKW19, YCST22]. **Clusters** [DV16]. **CM** [Eck94]. **CM-** [Eck94]. **Co** [ZM96]. **Co-Coercivity** [ZM96]. **coarse** [DMK⁺94]. **coarse-grained** [DMK⁺94]. **Cocoercivity** [MT20]. **Coderivative** [MO07b]. **Coderivatives** [HY16, YY23]. **Coefficients** [MEV23, RP12, SW14, SW15, IK96]. **Coercive** [BS15]. **Coercivity** [ZM96]. **Coherent** [GSU21]. **Cohesion** [HKK11]. **Coincidence** [AAZ15]. **Collection** [RP12, SYZ19, ZN08]. **collinear** [Lag93]. **Colorings** [CZZ19]. **Column** [LS98b, RADK05, TQP22, LN93, Mit94, Ye92]. **Combination** [CGST96a]. **Combinatorial** [ABGJ14, BYZ00, BNT04, EAV10, FHKM06, MS02, PARN22, VD06, ZÁC17, Ali95, Onn94]. **Combined** [HYF05]. **Combining** [AA20, BCD⁺18a, IH14, RK19, YZ10]. **Commodity** [JJ15]. **Common** [BLT17, DR13, EL10]. **Communicating** [FFG99]. **Communication** [ZM06, GMS92, Lau94]. **Commutation** [GJ17, RSS14]. **Compact** [DP22, KS18, RR08, Sch05, TY04, ZT92]. **Compactification** [AM00]. **Compactness** [MZH20]. **Comparative** [BER04]. **Comparison** [AH16, BHHK00, Cel07, GHZ99, HAN11, MS11a]. **Comparison-based** [AH16]. **Compensation** [ZM06]. **Complementarity** [AM00, AFS01, ASS18, AHSS19, Ani05a, Ani05b, BM18a, BLRS22, Bil02, BW02, BKS16, CPS07, CH97, CX99, CY00, CQT03, CX08, CYZZ19, CLYZ22, CY10, CO12a, DIPR20, DIS04, DYC⁺21, FS97, FCF07, FFG99, FLT01, FT02, FT07, GS07, GNL11, HYF05, HK09, HMP⁺08, IPRT00, IS02b, IS02c, IS08, ISU12, JRT97, JFQS98, JR00, JRS10, KDB09, KP99, KN05, KFF09, KS14, KLLM22, KSH97, KSS99, KSX08, LR10, LLCN06, LP06b, LXL11, LM05, MN96, O'D21, Pot08, Pot12, RB05, RFNP14, Sch01, She14, dCST19, Sim11, SS97, SS00, ST09, Tse97b, TP02, Ulb01, WBME14, XS16, Xu06, YF00, Ye99, YZ16, Yos07, ZC09, ZY14, Zha98b, ZCT10, vdLTY07, DL91, Gow92, Kan96, KKM93, Li93a, Man91, McS94, MS94a, MPW95, TYF96, Zha94b]. **Complementarity-Type** [BKS16]. **Complementary** [Gre00, IPRT00, MPB02]. **Complete** [AP14, GM15, GIJT96, JL10, NYZ18, RT19, Sch96, RS96]. **Completely** [AKK14, Don14, LP15a]. **Completion** [CCS10, CCF⁺20, FGM17, RO18, iT17,

Van14, FKMN00]. **Complex** [JM18, SBD⁺11, SVD12, ZH06].

Complexity [AHLN16, AMS16, Ans02, BC14, BGM⁺16, BM18c, BRZ20, BM20b, BR21, CCLW14, CGT10a, CGT11, CGT12, CGT14, CGT20, CTW19, Cri22, CRS18, CRRW21, CW23, Ete20, Fil99, FV99, FL16, GHK17, GJV16, GLY96, GMM17, Gon99, GJT23, HL23b, HLP23, HWWY23, HCH20, HY15, KT14, KMM19, KMM23, LOZ23, LT10b, LM21b, LX23, LZ23b, MR10, MT04, MS10, MS11c, MS12, MS13, NS98, Pap16, PS20, Pot14, RW18, SP97, Shi17, Spa14, THZ23, Vav10, Yun14, dKV16, HH96b, JY94, Ren95, Tod92, Vav93, Ver96, Zha96, dRV92]. **Component** [CCN⁺18, DKLM22, EH20, WLS23].

Components [KLW18, TY11]. **Composite** [ATP21, ACS14, BIM23, BH14a, BAC11, BAR21, BH14b, CC19, CGT11, CN23, CT03, CPS18, DN22, DR18, FGO14, GL12, GL14a, GN19, GN23, HS21, HM15, HM16, HLY16, Jey91, JL03, JLZ20, KMM19, LSS14, LN07, LP15b, LST16, LZCW23, LM21a, Lu17, MS20, NC16, NY05, RW21, SFMF20, THG17, TDFC18, WPY23, Xu17, ZX21, Iof94, TZSW96]. **Composition** [BGN22, YWF19]. **Compositional** [KP22].

Compositions [KLW18, LMZ21a]. **Compound** [EN14]. **Compressed** [AI11, AI12, CWW18, ZYP21].

Compromise [BNL⁺18]. **Computable** [Den97]. **Computation** [BGV20, BM07, CH17, DW15a, DJS13, GLR14, HF14, KS12, LFKCT23, TQP22, Pan94]. **Computational** [AHLN16, BLG13, CCLW14, FWKS15, FL16, GR03, Luc09, Mit00, OF03, RS97, SBT16, THZ23, Wri98, Zas10, ZK15].

Computationally [HNO15, LT01]. **Compute** [BCD⁺18a, MPR10, MGGS09, Dan93].

Computing [Aus10, Bac14, CST19, EZ10, For05, FT02, FT07, GLTP98, GL08a, HH96a, INT15, PT18, PVZ07a, Pot12, Sag16, Spa14, XLD99].

Concave [AHLN16, BB23, BL22, Del19, GKPV01, HA21, HM16, KM21b, MOP20, Nem04, OLR21, ZLTD22, BD93, FM94b, GMR91].

Concavity [GVJ06]. **Concept** [MS02]. **conceptual** [SZ92]. **Concordance** [Gül97, CM11]. **Concordant** [FS23, Fay02, KU15, Lu17, MSS15].

Concrete [GNL11]. **Condition** [AZ09, AB12, AMS10, AFSS19, Ani00, BM17, BV21, CWY11, CCH05, CCP08, CC14, CH17, EF02, FS12, FGO14, FV99, HSS20, JJ15, KYZZ22, Kel99, MP97, MY09, Mat05, MS11b, MPR10, NF01, OF03, Pat16, QW00, QW01, Ren96, See22, VD06, YZ13, YZS19, Zas05, Zol03, NT02, Ren95, War92].

Condition-Based [FV99]. **Condition-Measure** [NF01]. **Conditional** [Bac15, BPS15, BSR17, ET19, GC23, GH16, HKMS20, HCH20, KS16b, LZ16, LRZ21, Peñ23, SFMF20, dF09]. **Conditioning** [CT13, DU21, EF02, Fle98, NRP19, Pat16, Wri98, AW93]. **Conditions** [AAS17, AXY23, AHSS19, Aus10, BT04, BYZ19, BT00a, BE14, BTKNZ99, BGY⁺23, BH19, BOT06, BPC11, BGM⁺16, BCW08, BHP18, BCS99, BKMW20, BHR19, BKS16, CLMP10b, CT02, CdIRT08, CHW12, CM20, CM22, CNY14, Che15, CW18, Chu18, CHL16, CLPA21, CDZ17, DZ14, DKM18, DLW99, Dol20, EW09, FBM15, GW21, Gfr07, Gfr13, Gfr14, GM15, GJN06, HMW21, HS06, HN09, HJ02, HS11, HN04, JLD03, JL03, KT18, LP06a, MM11, ML05, MY10, Ni05, PY97, Pen17, RT06, SN07, SDR20, SPM18, SKR16, TM15, WX20a, WY01, WY03, XY10, YZZ97, Ye99, Ye00, YZ10, YZ16, ZFL06, ZN11, Zhu02, Di96, DFKS11, Gil97, JSC95, KS10, Sta92].

Condor [CF01]. **Cone** [AMRS16, AKK14, Aus15, BBW18, BF08, BGM19, BA13, CT06, CYZZ19, CH17, CST19, Don14, EI06, FBM13, FSF12, FLT01,

GVA11, GU22, HYF05, HW10, HNKK17, JY04, JL18, JBAS10, KFF09, Kas10, KM21a, KSX08, LP15a, LST21, Lim11, LY07, MOS14, NT16, OOR17, OR11, PC08, Sha97, TW14, Tse07, YZ16, ZY14, ZN14b].

Cone-Constrained [JY04].

Cone-Continuity [AMRS16]. **Cones**

[BSW23, BP07, CM20, CM22, Chu03, CY10, CL14, Fay02, FG04a, GS07, HL02, KFGT21, KT00, LL23, LRS22, LS91, NT98, PA14, Per23, Ran06, Ros14, RT19, Sau20, Yos07, ZW12a, ZVP06]. **Confidence** [Lu14, Vog08].

Configurations [RO18]. **Conflicts** [EL08].

Conformation [Wu96]. **Conic**

[AB08, AT06, BTNR02, CCH05, CCP08, CP01b, DJV06, DSZ17, EF02, FV99, Fre03, GL15, Góm21, HL23b, JR08, KKT20, KM19, LP15a, LFJ⁺11, LZ23b, MÖ09, MDV12, MOR15, NS14, Ni05, OHF12, Peñ00a, PR20, PRT02, PFA14, PH18, RSKW19, SOT09, SH15, SAV14, STY15, WA15, WPD22, Zha00, ZN05]. **Conic-Constrained** [GL15].

Conic-Quadratic [BTNR02]. **Conical**

[BJ22, DLW99]. **Conjecture** [GR10c].

Conjugacy [LTP23]. **Conjugate**

[BTT96, Bla21, BW05, DO19a, DHL⁺99, DY99, DK13, GP19b, HZ05, HZ14, IY09, IS02a, Luc09, NYF11, PP18, QQS03, Ren96, Sat22, TK02, GN92, IKR⁺91, Ort91].

Conjugate-Gradient [Ren96]. **Connected**

[RK19]. **Connections** [RR15].

Connectivity [YmZS15, GMS92].

Consecutive [HL06]. **Consensus**

[BHP23, FHPS22, SLWY15, SY18].

Consensus-Based [BHP23, FHPS22].

Consequences

[AMS10, AMRS16, AHSS19, AFSS19].

Conservative [LT21, Sva02]. **Consistency**

[HS19, JHR23, Ram18]. **Consistent**

[Den14, KCS97]. **Constant**

[BHG07, GSZ14, LLT22, MS11b, QW00, QW01, Qi16, SW14, SW15, Zua03].

Constants [AC02, CCP22, SK06].

Constrained [ANT16, AMS10, Ani02,

AKR23, AKK14, AO18, AFS14, ACP11a, ACP11b, AD06, ACD08, AST10, ACL99, BQX15, BCL07, BBTT12, BE14, BCRZ21, BHHK00, BG08, BGM⁺16, BM18c, Bla21, Bla23, Bom15, BMSS19, BP97, BHP23, BM20b, BCN08, CKP12, CGT14, CM20, CM22, CTW19, CR23, CSW12, CDM20, CV17b, CPRZ20, CNW10, CO12b, CRS18, DV97, DEAM97, DR14, DGN12, DW10, Dos97, EA99, FLP02, FLLR14, FS96, FIS10, Fle14, FV16, FBM13, FM97, FS05, FLT03, GSU21, GP19a, GHKL17, Ger08, Ger11, GMS02, GL15, GKR14, GHHL05, Gou99, GSW97, HPU19, HZ06a, HH96a, HLP23, HR14a, HSS20, HK06, HK10, HSW14, HR22, HY06, Iid12, JHR23, JAL15, JY04, JST12, JL16, KLLM22, KK02, KLT07, KMM19, KS16b, KR02, LLS05, LNP98, LM02].

Constrained

[LT99, LT00, LT10a, LJ02, LNP08, LST16, LM99, LY11, LLC22, LLS06, LL09, LLS10, LLR16, LFJ⁺11, LSL08, MNP98, Mar17, MLC22, MM21, uDR15, MP99, MRS14, MBW09, NS07, ND10, NR20, OBN23, POLW20, Pen19, PC03, PM15, Qi99, QQ00, QLSZ18, RP23, RSKW19, RN98, SS05, SU14, SO21, SSW16, SZY16, SBT16, SV07, SY13, Sol98, SLWX23, SW99, SLM05, TDKC14, Tse02, Ulb01, VIT22, WX16, XSLZ11, XA18a, XHL14, XYZ15, Xu17, Xu18, XLZH19, YH01, YLQ03, YPL21, Zas05, ZJS18, ZL20, ZC20, ZL22a, ZWHZ23, Zhu02, ZU11, Zie14, dKHL17, vAS14, BCT93, BNS95, Bur92, BTZ92, EA95, FMS94, Gil97, GR94, GK95b, GLW91, MMZ95, NN91b, PZ94, RS94, War92, Wri92].

Constraint [AHSS12, AMRS16, AFSS19, BJ22, BM20a, BDdSM15, BH19, BKMW20, BHR19, CS08b, Din98, Dol20, FLN10, Fle12, Gfr11, GY17, GM17, GM19, GJLVP14, GVJS10, GXZ17, Her09, HY16, IS02b, IS04, JLD03, Kan14, KS10, KNT10, Li97, LNS00, LJ02, LN03, LN05a, LNP08, LPR98, NKT10, SD20a, Son06, Sor97, TAW06, VR05, WB16,

WA15, Ye00, ZN04, ZN07b, ZW12b, dSTVB18, FM91]. **Constraints** [ABMS08, ASS18, AHSS19, Ani05a, Ani05b, Ans17, AKR23, BT04, BT00a, BE06, BDM16, BM18a, BCWP21, BCU00, BMW10, BFMS14, BKS16, BL09, BA13, CCL09, CGT20, CdIRT08, CSW15, CM21, Chu16, CS15, CGST96a, CGST96b, CO12a, CWZ18, DLM21, DFNS05, DZ07, DR03, DHR07, DW15b, DJV06, DFS03, DK10, FFK98a, FJS98, FRMP18, FLRS06, FHN09, FP98, FT02, FT07, GLCxY18, GW21, Gfr07, Gfr14, GY17, GLT03, GNS08, GLHZ11, GNL11, GLY12, GYZ14, GLYZ14, HLB20, HCH12, HW10, HJ02, HH06, HK09, HK10, HS11, HR12, HR14b, HL06, dMM10, HMP⁺08, HS17, HYY16, ILR01, IS08, ISU12, Jey03, JR00, KDB09, Kan14, KS10, KS14, KY21, KLLM22, KNP98, KCS97, KU15, Kuč08a, LRZ21, LRP16, LT02, LLCN06, LN03, LXL11, LX14, LMX17]. **Constraints** [Lue08, LA08, LSF⁺23, LSTZ07, LZ10, Mal07, MX06, Men17, Nga15, NTA04, OHF12, PS10a, PZ98, PZ00, PZ03, PS11, PY97, RB05, RT06, RR08, Sch09, SW11, SFM14, Sch01, SSSZ10, Sha97, SKR16, SLWX23, SU10, SKL09a, SXMW13, STY15, TN21, TAW06, TSR22, Trö05, THZ23, Wac14, WJ00, WWLY21, WBME14, WK19, Xu06, XY10, Xu20, Xu22, Ye99, Ye00, YZ16, Zas13, ZXZ16, Zie14, vAH14, vAPA19, vdBF11, BM94b, CJ18, CGST93, FM94b, GK94, GMS92, Hei93, LS93, Li96, MT91, Out94]. **Construct** [YZ13]. **Constructing** [ZFL06]. **Construction** [Dan21, KdK23]. **constructive** [Wan95]. **Contact** [BTKNZ99, BHKO02, BHK⁺09, KP98]. **Containment** [ALSV18, KTT14, KTT15, PR07a]. **Containments** [Jey03]. **Context** [VD06]. **Contextual** [RP23]. **Contingencies** [DKL21]. **Continuation** [CX99, CC99, CY10, CH15, HYZ08, Lov11, MNP96, MNP98, MW97, SK22, Wu96, CH93a, LP93]. **Continuation-Smoothing** [CC99]. **Continuity** [AMRS16, AVS21, BSTV18, CM17, CKS17, Gri19, LTAP22, LP22, Rob07, SJM21, SW07, TM15, Gow92]. **Continuity-Like** [AVS21]. **Continuous** [AFFG14, BK12, BBW07, CSY23, FHKM06, FHN09, GHK17, GLHZ11, GN17, GN20, GXZ21, HKMS20, HN05, HN07, HHP18, HG16, JY04, LM23, Luc02, MST11, MTB23, MBW09, NT06, Nem04, Pul00, SFP11, SW14, SW15, SBFA17, Tüt03, VIT22, Zhe20, ZT98, Dan93, ZT96]. **Continuous-Time** [MTB23]. **continuously** [Luc92]. **Continuum** [TY04]. **Contour** [LSW06]. **Contracting** [DN20]. **Contraction** [RTBG20]. **Contractions** [Chu21b]. **Contractive** [HLWY14]. **Control** [BDM16, BM16b, BM18a, BHHK00, Bet19, BG08, CT02, CdIRT08, CHW12, CT12, Chr20, DFS03, FV07, FGG04, Ger08, Ger11, GHHL05, Her09, HMW13, HV05, HH06, HK10, HSW14, IK00, IT18, JS20, KS99, KS00, KU15, KR02, Mal07, MN14, PZ03, PW06, QW20, RT06, RFB⁺11, Sch09, SW11, SU14, SKC12, SKR16, Trö05, VZQD17, Wac14, ZML21, ZHE23a, Zie14, Dum93, GK95b, IK96, RHW93, Ral96, Wri91]. **Control-State** [Ger08, Ger11, RT06, Trö05]. **control-structure** [RHW93]. **Controlled** [Cab05]. **Controller** [LLS05]. **Controllers** [RS97]. **Conundrum** [MRS16]. **Converge** [BSW23, Las04, PV23]. **Convergence** [AA06, Abs05, AA20, ATP21, AAGM22, AFC22, AHO98, AMHL05, Alv04, ASS18, Ani05a, AD19, ASSS23, AP16, AC18, AH16, ADR19, ADR22, BR23a, BCL07, BGN22, BSV14, BB21, BD17, BT14, Bec15, BH20, BFO19, BBCS21, BCS21, BT00b, Bia16, BF96, BDMS09, BCCL22, BT94b, Bol14, BPR20, BL91, BLY14, BLT17, BS94, BGNW05, Car22, CCM23, CM16, Cha02, CT93, CNQ97, CR97, CW14, CSS19, CS22, CLL23, CK00, CMV19, CGST96a, CGST96b,

CSV09, CP01a, CY14, DSP10, DHL⁺99, DY99, Dai02, Dav15b, Dav15a, DGT20, DV97, DEAM97, DG23a, DJV06, DG23b, DP23, DLT03, ES22, EA99, Ete22, FIS10, FS12, FGO14, FLT02, FGL⁺02, FLRS06, Gar21, GAP08, Ger08, Ger11, Gon14, GT97a, GT97b, GOST01, GR10a, GR10b, GLR15, GJT23, GW19, Gri19, GY20, Gui16].

Convergence

[GXZ17, GL18, GOP17, GOP19, GP19b, HYZ08, HdR02, HS21, HN07, HL14, Hol04, dM08, HLR16, HLY16, HK92, ISU12, JPS99, JW21, JZZ20, JW14, JE19, KT03, KN05, KFF09, KS14, KY21, Kiw04, Kiw07a, KT04, KRZ17, Kor00, Kuč08a, LY98, LRWW98, LPW12, LV22, LLAN22, LF01, LN07, LUZ15, LP15b, LMQ23, LFP17, LMZ15, LW15, LYS17, LR21a, LS21, LM05, LJ16, LS02, LM20c, LSZ98, LSL08, MM08, Man91, McK98, McS96, ML05, MÖ10, MS18, MM05, Mis23, MER18, MGR18, MOP20, MT98, MT99, NT06, NC16, NRP19, NOS17, Nem04, NT16, NK10, Och19, OR16, Peñ23, PP16, PW17, Pul00, QP23, Ran06, RHL14, RKG08, RN21, ST13, Sat22, SU15, Sch01, Sch16, Sch96, SDR20, SdM00, ST14, Sim11, Sol98, SZ98, SSD22, TY12]. **Convergence** [TBZ16, Teb97, TP20, TWB⁺03, Tor97, TDZ20, ULC20, VGO18, VJFC18, WB05a, WB05b, Wal08, WLWY15, WLLY16, WHY⁺19, WWLY21, WLN23, WLKK23, WLS23, WCP17, WS11, Wri05, Xu22, YY95, YF00, Yin99, YNS20, YN17, YPL21, YLY16, YZS19, Zas10, ZCH⁺23, ZW12a, ZC10, ZMB⁺20, ZPXQ21, ZM96, dF09, dKHL17, BQ95, BKT99a, Boy95, CGST93, EM91, GN92, GHS95, Gur94, Ius91, Kan96, KS91, Kup96, Li93a, LT92, Mon98, Pow95, SZ92, Tor91, Tse91, Tse92, TM95, ZTD92, ZTP93, Zha94b, Zhu96]. **Convergent** [Ani02, AP21, BHG07, BRB19, CODL22, CH15, CH16, FHIS16, FS05, FQ96, GH16, GR14, GKV03, IS02c, JLLP16, Las06a, LT02, LSW06, LST20, MBW09, PNA10, PS98,

PS10b, QQ00, QLSZ18, SP97, SS00, STY15, Sva02, Tse02, Wat00, WBME14, ZK14, ZOB20, ZL03, ZW12a, ZCT10, BH14b, CH93b, EW94, Li93b, McS94, PY93, ZT93].

Converging [LCC⁺20]. **Conversion**

[KNP98]. **Convex**

[AFH⁺13, APX17, AAGM22, AB12, And00, Ans98, ATU23, AGJJ00, AV20, AI20, AFGG11, ASSS23, APR14, ADR22, ACC93, AT06, AFGO20, BJ22, BO17, BD17, BM20a, Bec15, BPS15, BTZ97, BPT97, BOT06, BY11, BP05, BCU00, BM14, BMR00, BDMS09, BCW08, BLY14, BCD⁺19, BU22, BHS15, BDL⁺16, BL22, BH14b, BGH18, BCGH08, Cal10, CG08, CKLP07, Car23, CODL22, Cha02, CM11, CCR17, CCF⁺20, CBFG23, CL14, Chu16, Chu21b, Chu18, CC02, CGST96b, CH13, CDZ17, DSS09, DD19, DENR20, Den97, DLW99, DGN12, DMS22, DW22, DSD12, DNSD13, DN20, DR96, DK10, DLR17, DR18, EZ10, EL09, FMP18, FLN10, FLY11, FRMP18, FGO14, FH14, FB00, FBH22, FV99, FT08, FHN09, FQ96, FLT03, Gar21, GP19a, GW21, GL12, GL14a, GTdS06, GLY96]. **Convex** [GM12b, Gon14, GKR14, GDG22, Gor22, GN19, GN20, GN23, GU22, Gui16, Gün14, GWZ15, GP19b, HLTW14, HNO15, HHI⁺20, HA21, HTT⁺15, HLZ08, HKP18, HKMS20, HTY12, HLWY14, HHY15, HM16, HN09, HJ02, HR22, Hu07, HLY16, HY15, HR15, HPW23, IY09, IS02a, JMW08, JFX17, Jey03, JLD03, JL03, JL10, JST12, JLZ20, KFGT21, KF18b, KKT20, Kiw97, Kiw04, Kiw08, KT00, KS18, KNT10, Kuč08a, LRO05, LPW23, LZ16, LRZ21, LZ23a, Las16, Lem98, Lew96, Li97, LS97b, LNS00, LN03, LN05a, LN05b, LN07, LNP07, LNP08, LFLL09, Li10, LN11a, LN14b, LST16, LMP⁺18, LM20a, LNYZ21, LCD⁺21, LBT22, Lim11, Lim23, LFW98, LNS18, Loc15, LMO06, LFN18, LM23, LZ23b, LPV05, Luc09, LPR98, LDLS20, Luk08, LS98b, MSFL17, MP14a, MZ99, MSQ98, MM05, MOP20, MG98, MT98, MS11c, MS14].

Convex [MST11, MARS10, MTB23, Mur03, NRP19, Nem04, NS07, NV99, Nes05, ND10, NS21, NY05, NKT10, Nga15, PS10a, PC08, PH23, Phu10, PW16, Qi16, QLSZ18, RNV09, RS11, RC22, Ren16, Rev97, Ric11, RvdVH15, RSvdVH16, RW07, SS17, ST22, SS05, SD20a, SPW15, Sau20, SW11, SFM14, Sch16, See97, SKC12, ST14, Sol07, Son06, SMG14, SKL09b, SK98, Sva02, TY04, TN21, THG17, THDL22, TDKC14, TDFC18, Tse97a, Vel15, WUR⁺23, WLWY15, Win08, Wri00, WLZY07, WSLZ17, XY15, Xu17, Xu18, Xu20, Yan09, YNS20, YN17, YPL21, YCST22, Zha00, ZWL10, ZFL06, ZN04, ZN07b, Zhe20, Zhe23c, Zhe23b, ZCTW12, ZMB⁺20, ZLTD22, dKL11, dBdH07, AH05, BMR94, BT94a, CH93b, CGST93, FMS94, Gar93, GLW91, GK94, Gül92, Ius91, JS95, KN93, LS93, LT93, Mel96]. **convex** [MS94b, NN91b, PZ94, See92, SGK21, TK96, dRT92]. **Convex-Concave** [BL22, HA21, HM16, MOP20, Nem04, ZLTD22]. **Convex-Constrained** [HR22]. **Convex-valued** [GTdS06]. **Convexification** [DRT17, FS08, FPT22, VZQD17]. **Convexifying** [KS15]. **Convexity** [AP14, BSTV18, BCD18b, BR07, CHPA16, DLV10, Fay06, FBO21, GH16, KMP23, Las09, LTP23, Lim11, SL21, WLZY07, TK96]. **Convexly** [CTW19, CT03]. **Convolution** [FMP19, IT18, MWDS18]. **Coordinate** [AB12, BT14, BT21, BDL23, CLL23, CCT21, CN23, CP15, Cri22, DLR16, DPW15, FR15, FB19, HY15, LLX15, LW15, NC16, Nes12, NS17, Och19, RK20, ST13, XXS21, Xu18, Yun14, Wri12]. **Coordinate-Descent** [FB19]. **Coordinate-Free** [AB12]. **Coordination** [DMK⁺94]. **Coordinative** [Wan17]. **Copositive** [Bom15, BD09, NYZ18, PR07b, dP02]. **Core** [KFGT21]. **Corner** [ACHW21, ABP18]. **Corrected** [Val20]. **Correcting** [ST10]. **Correction** [BJKJ17, Gis21]. **Corrections** [BDdSM15, ML05]. **Corrector** [DIPR20, DSD12, Gon99, JPS99, KT14, KSS99, KJ17, LMT09, LP06b, LM05, Mia96, MT04, PTZ05, SPT08, Sim11, CLMS93, DL91, LMS92, MS94a, Pot96, TZSW96]. **Corrector-Predictor** [DIPR20, LP06b]. **Correlated** [SFP11]. **Correlation** [LdQ11, PM15]. **Corrigendum** [CM22, KN04, QW01, Zhe23c]. **Cost** [Abs05, AHLN16, BGV20, BPT97, CHW12, MBW09, Pat98, XLD99, RV93]. **Costs** [ARS07, CGC15]. **Costs-to-Move** [ARS07]. **Coulomb** [BHK002, BHK⁺09]. **Countably** [Gha17, GRS21, KTSB21]. **Counterexample** [GR10c]. **Coupled** [ACS14, Bet19, THZ23]. **Coupling** [ACP11a, CC02, GK94]. **Covariance** [HH96a, Lu09, ZJS18]. **Covariances** [HP07]. **Covariate** [QCLP19]. **Covariate-Dependent** [QCLP19]. **Cover** [AKT17, WLZY07]. **Covering** [AI20, Aus15, BP15, BDDM19, DFO20, EMN22, HHJL23, Jan06, WK19, Yil06]. **CQ** [SYZ19]. **Criteria** [GS01, XB99]. **Critic** [HWWY23]. **Critical** [CD00, CM20, CSV09, FIS20, GVJ06, HLB20, HNP00, JRS09, OOR17, OR11, Spa14, Sch92, CM22]. **Criticality** [MS19]. **Crossing** [Mut01, dKP12]. **Cryptography** [ZÁC17]. **crystallography** [DHLN92]. **Cube** [EL14, HPW23]. **Cubic** [BM17, CD19, CGT14, Lie20, YZS19]. **Cubic-Regularized** [CD19]. **Current** [DKL21]. **Curse** [HN19]. **Curvature** [CW18, FLP19, LLAN22, LM21a, LR22, WWLY21, Zha96]. **curve** [IKR⁺91]. **Curves** [Wen97]. **Curvilinear** [LRR98, DEG⁺91]. **Cut** [Bar96, BS19, DK22, Lau01, LSW06, LB00, Pfe08, RR08, SM99, TZS02, BMZ01]. **Cut-Generating** [BS19]. **Cuts** [ALT⁺21, AL14, ABP18, BCDJ21, GV00, Gui20, GMS21, HAN11, Luo97, Mas20, NS21, OG03, ZPR00]. **Cutting** [AWW09, Ans98, BM14, BLST19, BBV02,

DSP10, DG09, DKLM22, FMW96, FGG04, GLY96, GV00, dMM10, Kiw97, Luo97, MP14a, Mit00, MG98, NV99, OG03, Por20, SXMW13, TZS02, AEGS93, Boy93, Boy95, KN93]. **Cutting-Plane** [DG09, SXMW13]. **Cutting-Planes** [BM14, Por20]. **Cutting-Surface** [dMM10]. **Cycle** [AP22, HL08c]. **Cycles** [ABW21]. **Cyclic** [BPS15, BLY14, Cri22, Lim23, MGR18, ST13, Yun14].

D [LN09]. **D-Gap** [LN09]. **D.C** [AT03, TA98]. **Damped** [ACR19, Lu17, SDR20, SW99]. **Damping** [AA20, AL21]. **Dantzig** [Che05]. **Darboux** [Slo22]. **Data** [BRA⁺20, Chu20, Fil99, GJLVP14, Hol04, JS20, LM18, LYSA20, Luc02, MMZ95, MN13, Nol98, PR20, RP23, RG22, WZZ18, KSW94, LS93].

Data-Driven [BRA⁺20, RP23, RG22, WZZ18].

Data-Independent [PR20]. **DC** [Bon97, CLPA21, FLY11, GLM98, JBK⁺18, LZ19, MM08]. **Decay** [CCH05, NA20, SAZ22]. **Decentralization** [Wan17]. **Decentralized** [HBM21, HZZS22, LdF08, LOZ23, SLWY15, SY18, XKK22, YLY16, ZHE23a]. **Deciding** [ALSV18, BRS15, Ver96]. **Decision** [CSY23, Gha23, GS01, HG16, NJS21, NS18, QCLP19, RG22, WD23, YK18].

Decision-Dependent [CSY23, NS18, WD23]. **Decisions** [AFFG14]. **Decomposing** [BFM98]. **Decomposition** [AP18, ADL08, BHM18a, Bec15, BW07, CSPW11, CV17a, CM11, DNSD13, Ent96, GB22, GJ17, GR12, Gui16, Har14, HM15, HHY15, KPZ19, KRR99, LZ03, LS20, LZ14, MÖ07a, MÖ09, MÖ10, MS13, PT18, RCGR18, SI13, SZ14, ST14, SVD14, SAV14, TLT⁺18, VJM16, WDLW23, WA15, XA18b, YL11, ZK14, DMK⁺94, DMZ94, MOT95, ZPR00, Zen91]. **Decomposition-Based** [MÖ07a, CM11].

Decompositions

[BWY10, DP22, EZ10, MEV23, SVD14]. **Decrease** [Kel99]. **Decreasing** [LSS22, RGY99]. **Dedication** [OS99]. **Deep** [CHP20, LSS22]. **Deficient** [CGT14, CNW10]. **Definable** [CH15]. **Defined** [See97]. **Definite** [Chu03, Lim11, SH15, Fle95]. **Deflected** [dF09]. **deformation** [Dan93]. **Degeneracy** [Fle98, Fle14]. **Degenerate** [Ani00, Ani02, BCLN22, Gfr07, ISU12, KJ17, Wri02, Wri05, XYZ15, YT02, TM95]. **Degradation** [ABT00]. **Degree** [Mar05, Mas20, NR09, Pap17, SWW21, iT17]. **Delay** [MIM20]. **Delay-Tolerant** [MIM20]. **Delayed** [SY18]. **Delays** [Pul97]. **Delivery** [CKL97]. **Demand** [CSW15, CSY23]. **Demands** [BRU97]. **Dennis** [CY99, CL23, YWAS17, Don12, EA99, HL98]. **Denosing** [BC05]. **Dense** [Lás17]. **Densities** [BM07, CZZ19]. **Dependence** [QW00, QW01, QZ08]. **Dependent** [BM16b, CSY23, CJK98, CSW12, KS05a, LY98, NS18, QCLP19, WD23]. **Depending** [Cel07]. **Derivation** [WN16]. **Derivative** [AO06, AD09, BBN19, BLG13, BFMS14, CGT12, CH17, CHN18, CHNT21, CSV09, CGT10b, CR21, FLLR14, GPR02, GDG22, GR10a, GR10b, HK10, HR22, LLS06, LL09, LLS10, LLR16, LLRV19, LS02, MWDS18, MW09, hRK14, ST10, SHP18, WS11, ZCS10]. **Derivative-Free** [AO06, AD09, BBN19, BLG13, BFMS14, CGT12, CSV09, CR21, FLLR14, GPR02, GDG22, HR22, LLS06, LL09, LLS10, LLR16, LLRV19, LS02, MWDS18, MW09, hRK14, ST10, SHP18, WS11, ZCS10]. **Derivatives** [AD04, CV07, GJV16, GN20, KM09, LS13, LT10a, MS03, PV23, SC91, See92, War96]. **Deriving** [SW07]. **Descent** [Abs05, ASSS23, BT14, BH20, BT21, BTMN01, BM17, BSR17, CT13, CWW18, CC19, CGRV21b, CD19, CGT10a, CLL23, CCT21, CN23, Chu16, CC02, Cri22, DL15,

DLR16, DAJJ12, ES22, FR15, FB19, GRVZ15, HZ05, HL23a, HY15, JZZ20, LLZ23, LW15, MPTD21, MGR18, Mur03, NYF11, NC16, NL14, Nes12, NS17, NLZ10, NT19, Pat98, QWY04, QP23, RZ01, RK20, ST13, Sch16, Tse99, XXS21, YLY16, Yun14, ZCH⁺23, ZMB⁺20, Zhu95]. **Descriptions** [Kum16, SPW15]. **Design** [Bar96, BTN97, BTKNZ99, BRU97, FGM12, GHK17, GNL11, JKZ98, KNX16, LLS05, Lau00, LRP16, MPSU19, PW05, Rag13, RCGR18, RS97, SCRS00, YZ13, BTB93, BTN94, GMS92]. **Detect** [Shi18]. **Detecting** [NYZ18]. **Detection** [BCW14, BCN10, Góm21, Kel99, LR22, LLZZ19, RSKW19, ZLCL21, LP93]. **detectors** [GK99]. **Determinant** [DZ07, WST10, YST14]. **Determination** [TZ10]. **Deterministic** [AADD09, BH20, Gri19, Pan19, SS23, XA18a, YNS20]. **Deviation** [GZ17]. **Deviations** [GY23]. **DF** [SHP18]. **Diagonal** [BJKJ17, CGRV21b, Don16, GK96, KK92, SK06, ZNW99, GMR91]. **Diagonalization** [GL08a, JL16, ULC20]. **Diameter** [AP22, Ris94]. **Dictionaries** [AAJN16]. **Difference** [APX17, AV20, CPS18, LBT22, THDL22, YPL21]. **Difference-Max** [CPS18]. **Difference-of-Convex** [APX17, LBT22, YPL21]. **Difference-of-Convex-Functions** [THDL22]. **Different** [EF02, Pic13]. **Differentiability** [BU22, MS20, Sal17, AB18, Jey91, LSdZ18, Sha94]. **Differentiable** [BTT96, FSF12, FLT03, GKR14, JS20, Li96, Li97, SW99, ZA14, Zhe20, Zhe23c, Zhe23b, Luc92, TYF96]. **Differential** [BCL07, CW14, DST23, DR00, HV05, KRT07, LMZ21b, QW20, VJFC18, ZML21]. **Differentially** [KBGY22]. **Differentiated** [HAG18]. **Differentiation** [Gfr14, MA00, vAPA19, Dix91]. **Diffusion** [FHPS22]. **Dimension** [LL22, YCST22, GHRT98]. **Dimensional** [AHLN16, AP18, BGV20, BHKM14, BM16b, BHK⁺09, HDL21, HPW23, JJ15, Lev00, Loc15, MRS16, MSG20, BDM16, Kup96]. **Dimensionality** [HN19]. **Dimensions** [BCT19, HMN10, LRWW98, LPW12, MN09, Zha94a]. **Diminishing** [RTM23]. **DIMIX** [RTM23]. **Dini** [War96]. **Direct** [AA06, AF01, AD06, ACD08, ADL08, AILT14, ALT19, CMVV11, DT91, GV14, GRVZ15, VZQD17]. **Direction** [Bol14, DIPR20, GMSS17, HTY12, HLR16, IY09, JH14, KSS99, LM05, MS13, RB18, Sim11, STY15, TY12, TTT98, ZL20, dPRT01]. **Directional** [APX17, AAI07, AGH10, BYZ19, CW18, CGT10b, DPS17, Gfr13, KM09, PT18]. **Directionally** [TZ10]. **Directions** [AADD09, BH20, BPS99, FGM17, KN02, KN04, QWY04, SSK98, Toh00, Mon98]. **Disappearance** [LDS22]. **Discontinuous** [ABK22, HMW21, MA00, MS06a, AW94]. **Discrete** [ALT19, BBLZ17, CS22, DFR07, FHN09, GHZ99, GdW00, IS02a, KP98, KSdM01, MN09, Mar05, MÖ10, Mur03, RV06, RN98, Sag16, TSAKN23, TMHP06, YKI04, ZAL21, vdLTY07, And96b, Ral96]. **discrete-time** [Ral96]. **Discretizations** [Che01]. **Discretized** [ZT98, ZT96]. **discrimination** [BM94a]. **Disjoint** [ABDL21]. **Disjunctions** [MR10]. **Disjunctive** [BGY⁺23, Gfr14]. **Dispersion** [HLTW14, WX16]. **displacement** [BL95]. **Disposal** [GL10, JJ15]. **Distance** [ACHW21, AT03, AAZ15, BQX15, BDL21, CLPT06, DPW15, DKVW17, INT15, LH02, MPSU19, MP10, MW97, NY05, PR20, PP12, RBDM22, RO18, RG22]. **Distance-Based** [RG22]. **Distance-Sparsity** [ACHW21]. **Distances** [BGV20, BNL⁺16, dEH01]. **Distributed** [AH19, BJKJ17, BBG⁺20, DW15a, DSK20, FV07, dM08, HFD16, lid13, IH14, JRJ10, KS12, KNS11, LZ18, LZ23a, LYSA20, LS22, LL20, MIM20, MARS10,

NOS17, Pan19, PB17, SB18, SSD22].

Distribution [BRU97, HP07, Sol98, dKLS15, CD92, FM91, FM94a].

Distributionally

[BHM18a, CDL14, CCN⁺18, DM20, DMM22, GB22, GXZ17, LMX17, MLC22, MU20, NJS21, PS21b, RBDM22, Sha17, SZL23, XA18a, ZXZ16, ZAL21, CJ18].

Distributions

[BCM03, Pfl10, WD23, vAH14].

Divergence [HZZS22]. **Divergent** [RZ01].

Do [LM19]. **Dogleg** [ZX99]. **Domains**

[Dan21]. **Dominance**

[CS15, DR03, DHR07, DR14, DW15b, GNS08, HSS17, dMM10, Lue08, MLC22, OR02, RR08, SXMW13, CJ18]. **Dominant**

[BBMW16]. **Dot** [WPD22]. **Double**

[DGN12, JBK⁺18, KRZ17]. **Double-Layer**

[KRZ17]. **Doubly** [CST19]. **Douglas**

[BM16a, BD17, BM20a, BH14a, BAR21, CM16, DP19, Dav15b, LR21b, LM20c, TP20].

DQA [BMR94]. **Drawings** [MW06].

Driven

[AA20, BRA⁺20, RP23, RG22, WZZ18].

Drops [CGTZ14]. **Drum** [CU99]. **Dry**

[AA20]. **Dual**

[AFC22, AHO98, And00, BER03, BER04, BT21, BF08, BCD⁺18a, Bom15, BH14a, BCH14, BR19b, CGRV21b, CERS18, CYZ22, CLO14, CDFG23, Chu09, CV17b, CMV19, CP01b, CH16, Dav15a, DP22, DHLN92, DR13, DG23b, DM20, FK00, FB19, FIS20, FG98, Fre03, FKS02, Gha23, GKR20, GG03, GLTP98, GOST01, Gre00, Gu00, Gui20, GMS21, HA21, HSS17, HHJL23, HIK03, HSW14, JR08, JS00, KPZ19, KJ17, KR02, LCC⁺20, LN14b, LS04, LMO06, LJ16, LSZ98, MPTD21, MP18, ML05, MZGS08, MS00, MS03, MT99, MDV12, NO09, NT98, NS14, OR02, Pan05, Pan16, PRT02, PFA17, PS98, Pot08, Qiu08, RT19, TWB⁺03, Toh00, TDFC18, TDZ20, Tüt03, Val20, Wri00, Xu17, Xu20, YY03, YT10, ZZST20, ZL22a, ZWHZ23, ZLTD22, dPRT01, AZ05, GT92,

Ius91, Meh92, MTT94]. **dual**

[MKT95, Mon98, RV93, Wan11, ZTD92, ZT93, ZR93, Zhu95, Mon97, Zha98a].

Dual-Degenerate [KJ17]. **Dualities**

[FLN10, LTP23]. **Duality** [AAS17, AZ09, ABW21, ATU23, ABD⁺18, AT00, Bac15, BE06, BTT96, BT20, BM07, BR19b, BAC11, Car23, Chu18, Chu20, Com14, Dax09, DG20, DO19b, FLY11, FBM13, FL16, FMP14, Gha17, GAD20, GF08, Gür10, HL08b, HY02, IS02a, JL10, KM19, LCC⁺20, Lem98, LFLL09, LP15c, LBH22, LV19, MRS16, RTW97, RR08, SW14, THZ23, XSLZ11, YWAS17, ACC93, BT96, Tha94].

Dualization [Pen00b]. **Duals**

[BTT96, KKW05]. **Dijkstra** [PB17, Pan19].

Dynamic

[ASNP16, BR23b, Ber17, BG08, BZ08, BHT16, BT19, CBJF97, Che01, CS22, DM20, ESKL18, FV07, GS21, Gui20, GMS21, HNO15, HN19, LdF08, LCC⁺20, MP07, MKU21, NA20, Pul97, SZ14, XA18b, Wri91]. **Dynamical** [APR14, AF22, BB21, BDL07].

Dynamics [ACR19, AL20, DD20, Ete22, GAP08, SDR20].

Earliness [CKL97]. **Easy** [Shi18].

Economics [vdLTY06]. **Economies** [JJ15].

Edge [CZZ19, Ete22, Fle98, ZSY10].

Edge-Colorings [CZZ19]. **Edmonds**

[DHL15]. **Effect** [ABT00]. **Effective**

[HCH12, RBDM22, Wu96, Lau94].

Effectively [GLTP98]. **Effects** [Wri01].

Efficiency [Kiw97, Nes12, NS17, Qiu08].

Efficient

[BER03, BS19, BF08, BR08, CCFP05, DP22, GL10, HZ05, HNO15, HKK11, JL19, LT01, LST18a, LLST19, LWZ15, LPV05, LSW20, OLR21, Pyt98, Ren16, Rot09, SSW16, SK06, SKC12, STY16, Win08, XS99, XY97, XY00, ZY14, ZAL21, ZLCL21, dBdH07, And96a, WZ95, YG91]. **Efficiently** [LST18b].

Eigenfrequency [SKL09a]. **Eigenvalue**

[AINT17, Ans00, ANP08, Lie20, Men17,

Nol98, Ous99, SF95, SW95]. **Eigenvalues** [AK08, CC18, GMO14, SNTI16, Ove92]. **Eigenvectors** [TP16]. **Ekeland** [GKNRP17, LN11b]. **El-Alem** [EA99]. **Elastic** [Ani05a, Ani05b, CO12a, Sta99]. **Electric** [PMDL10]. **Electrical** [SDGM99]. **Electronic** [SDGM99]. **Elementary** [LP15c]. **Elements** [SV07, ZT92]. **Eliminating** [LSS22]. **Elimination** [AY08]. **Ellipsoid** [BHS15, Dai06, FV99, Yil06, ZG03]. **Ellipsoidal** [BDPP14, GLRS15, Gür10, HP09]. **Ellipsoids** [Ans02, INT15, LH02, LH04, Yil06]. **Elliptic** [Bet19, CHW12, CK99, HS11, HR12, RT06, Voi08, Xu19]. **Elliptope** [dCST15]. **Elliptopes** [dCST19]. **Embedded** [GHW08]. **Embedding** [BQX15, HL08c, O'D21, PFA17, Qi16]. **Emission** [JS00]. **Emphasis** [ACB20]. **Empirical** [CGC15, LLX15, PP16]. **empty** [MS94b]. **Enclosing** [AY08, Yil08]. **Endogenous** [BG22, RS15]. **Energy** [LSF⁺23, Wu96, vAS14]. **Engineering** [SDGM99]. **Enhanced** [BOT06, GYZ14, KS10, LZ19, LLZZ19]. **Enhancing** [SSD22]. **Entropic** [LX14]. **Entropies** [FS23]. **Entropy** [BCM03, CS16, SW07, WN16, BL91, BL93, BH95, DHLN92, PY93]. **Envelope** [BPR20, DDD22, JMW08, PAV21, TSP18, Wri00]. **Envelopes** [BDL18, Loc15, PW16]. **Epi** [AB18, BH14b, MS03, MS20, BD02]. **Epi-convergent** [BH14b]. **Epi-Derivatives** [MS03]. **Epi-Differentiability** [MS20, AB18]. **epi-pointed** [BD02]. **Epiconvergence** [CT03]. **Epiderivatives** [FB03, KM09]. **Equalities** [DEAW99, KGM23, Zua03]. **Equality** [AKR23, AO18, BT04, BCRZ21, BG08, BCN08, CGST96a, CNW10, CRS18, DV97, DEAM97, DFS03, DK10, FS96, HLP23, HR14a, LNP98, LY11, MX06, SO21, WJ00, XC21, Gil97]. **Equality-Constrained** [AKR23, AO18, DV97]. **Equation** [CT13, FS17, YLQ03]. **Equations** [BW02, CNQ97, CSS19, FP97, GO21, GLT04, GER23, HMW21, HV05, IS02c, LYSA20, LRX14, MP99, Pen00b, QY14, QW20, Roy20, SH97, SSQ04, Ulb01, Ulb03, ZK15, ZN07b, ZN10, Dan93, DMZ94, O'L95, PQ93, Pan94, Qi95, YG91]. **Equilibria** [CCM20, DJS13, GXZ21, GNRPT16, HF14, KS12, LFKCT23, OLR21, Pot12, RS15]. **Equilibrium** [AVS21, BNL⁺16, BK21b, BHR19, CSW15, DLM21, DFNS05, Ete20, FK10, FLRS06, FB00, FP98, Gfr14, GY17, GLYZ14, GKNRP17, HM15, HS11, HSK15, KS10, KS16a, KKS19, LS22, LX14, LSF⁺23, NTZ23, Sag16, SU10, XY10, DFKS11, JSC95]. **Equipping** [HDL21]. **Equivalence** [ET19, HLB20, TYF96]. **Equivalent** [Las02, Mat05, QCLP19, WX22]. **Equivariant** [FSP15]. **Ergodic** [Bia16, DAJJ12, MS10]. **Erratum** [ACD08, FT07, Ger11, HL20, Kea11, MZ00, OOR17, ZT98, dKPS09a]. **Error** [BJ22, BBCS21, BLG13, CHW12, Den97, ESKL18, GZ17, HS06, Hu07, HN04, KKS03, KNS11, KNT10, KS05b, Li97, LN09, Li10, LM04, LT92, LT93, Mar05, NC16, NZ01, NY02, NY05, NT08, NKT10, Nga15, Pen19, RvdVH15, RSvdVH16, Roy20, Son06, SWW21, Stu00, Vui14, Wri98, WY01, WY03, Yan09, YZS19, Zha00, ZL22a, ZN05, ZW12b, dKL10, dKLS15, LL94]. **Errors** [BT00b, XBN20, Zas10]. **Escaping** [ABK22, DDD22]. **Essentially** [BM98a, BM98b, TZ10]. **Estimates** [CCH05, CK99, KS05b, Mar05, Zua03, BL91, BL93]. **Estimating** [AAZ15, CSW15, MP10]. **Estimation** [BH03, BT20, CPS18, DGT20, GHZ99, HCH12, HH96a, LYS17, OS17, PW05, QCLP19, RTBG20, MN93]. **estimator** [LS98a]. **Estimators** [NK10]. **Euclidean**

[And96a, BQX15, BD17, BCGH08, CBJF97, DPW15, DKVW17, GMM17, GJ17, Las22, LTP23, LTY12, LT20, MMN⁺22, Mar94, MBW09, QZ00, RO18, RSS14, See22, XY97].

Euler [BCL07]. **Evaluation** [AM94, BGM⁺16, CGT11, CGT14, CGT20, KLL22b]. **Evaluations** [AF01, AILT14, BGMT19, Pic13, PW06, SOT09]. **Evasion** [PMR19]. **Evolution** [AAGM22, CDL16, Hyn23, Mor07].

Evolutionary [Bet19]. **Exact** [Aus15, BDPP14, BCWW15, CG08, CYZZ19, DLM21, DdLM21, DL17, FS12, FT08, FSF12, GAD20, GYZ14, HNE16, HY02, HN03, JL18, KS10, LCC⁺20, LP15c, MY10, RK19, RQMG12, RPK03, STKI17, Sch12, SLWY15, SBFA17, SXMW13, THG17, XLxY21, YZZ97, Zas05, Zas13, ZA14, Li96, Luc92, PZ94].

Exactness [DL01, KS18, SL14]. **Example** [HPU19]. **Exceedance** [MU18]. **Excess** [ST03]. **Excessive** [Nes05]. **Exchange** [ET19, HW10, OHF12, ZWL10]. **Execution** [MCL10]. **Existence** [AZ19, AVS21, CGTZ14, FB00, GXZ21, HF14, JS20, KQ19, KP98, KT08, KRT07, OR16, SS23, Sha94, SSK98, Wan95, Zas00, BL93, Ver96, ZT92].

Expansion [BC09]. **Expected** [CT12, DR13, MPA21, PS20]. **Expected-Integral** [MPA21]. **Expensive** [BLG13, TPF22]. **Experience** [FL98, GR03, Mit00, OF03, ZNB⁺93].

experimental [KBS93]. **Experiments** [BV10, IKR⁺91, KH05, Kea11].

Explanatory [OF03]. **Explicit** [AZ08, ESKL18, HW10, KW10, Las02, LT10a, OHF12, RN21]. **Exploit** [Gor22].

Exploiting [FKMN00, KKW09, CL92, Hen95]. **Exploits** [HZ16, WML21a, WML21b]. **Exponential** [BR23a, DT98, NA20, SAZ22].

Exponentially [XA18b]. **Exposed** [NPS10, Ros14]. **Exposing** [BM94b].

Expressing [FFG99]. **Expression** [NWYZ21]. **Expressions** [Rut17].

Expressive [Sau20]. **Extended** [AAS17, Ber96, BA13, CPS07, FLN10, FGM17, GLT03, GR12, KS05b, MS20, MTZ03, PM15, SY19, WHY⁺19, YWAS17, ZR93, Zhu95].

Extended-Real-Valued [MS20].

Extending [BCT19, Zha98a]. **Extension** [GF08, LL94, WML21a, BMR94].

Extensions [AG14, Den14, FHN09, VR05].

Exterior [YT10]. **EXTRA** [LL20, SLWY15]. **Extraction** [KPV18].

Extragradient [CV17b, IJOT17, IJOT19, MOP20, MS10, MS12, MS14, MSS15].

Extrapolation [KLL22a, LZ18, WLS23, WCP17].

Extremal [MTZ03, PARN22, Tha93].

Extreme [GLdS05, GTdS06, GHHL05, LB18].

Face [FGM17]. **Faces** [NPS10, Sau20].

Facet [DGR17]. **Facets** [EB20, GMS92, RT05]. **Facial** [DKVW17, KW10, LMT18, PFA17, HP94].

Facially [Ros14, RT19]. **Factor** [GSZ14].

factorable [GW93]. **Factorization** [AO18, GV15, SE99, Shi17, TQP22, Vav10, WW20, YPC18, JYZ94].

Factorization-Free [AO18].

Factorizations [Gou99, HLB20, Wri99].

Factorized [ZCD00, YY95]. **Factors** [RTBG20]. **fails** [Mas97]. **Fair** [DFO20].

Families [ABP18, Lás17, SY13]. **Family** [HLR16, JRT97, MT99, PA19, YMT04, ZCD00, Mon98, YY95].

Fan [DV16]. **Farkas** [Bar08, BW05, DGLM14, DMVV17, FLN10, LZH14]. **Farkas-Type** [BW05, DMVV17].

Fast [ACR19, BC05, CL23, CU99, Dai06, DLR16, GM12b, GH15, GK94, Gro95, OS17, PMR19, XKK22, BH95, KF18a].

Faster [AP16, Fle01, Fox95, HL17, HL20, ST22, TDZ20]. **Fastest** [BDPX09].

FATCOP [CF01]. **Fault** [CF01]. **Feasibility** [AH10, ALSV18, BD17, BF08, BEET12, BCGH08, CG08, DLR14, DIMS18, FP98, GMSS17, GLY96, HL14, LL22, Liu20, LS98b,

NRP19, TZS02, WLWY15, Gar93]. **Feasible** [AGJJ00, BH20, BDL⁺16, CLMP10a, CWH06, DIPR20, DGL10, Fil99, FS08, Gon14, GVJS10, GJR08, HR15, JRS10, LT01, LNS18, NS21, Pfe08, WY15, WLM22, WT04, YLQ03, YP20, JRW94]. **Federated** [ZHE23a]. **Feedback** [AFH⁺13, LFKCT23, RS97, ZHE23a]. **Fees** [BK21a]. **Fejér** [ACS14, CP15]. **Fenchel** [AAS17, BD02, Boy93, Boy95, BT96, Car23, FLY11, GF08, IS02a, LCC⁺20, LFL09, LBH22, See92]. **Fenchel-Type** [IS02a]. **Fermat** [NARS14]. **Few** [CC18]. **Fiber** [ZM06]. **Fields** [LT21]. **Filter** [AD04, Ber96, FGL⁺02, GKV03, GLT04, GST05, GLR14, GLR15, LY11, MU14, RKG08, SS05, SZY16, WB05a, WB05b, FLT02]. **Filter-Trust-Region** [GST05]. **Filtering** [CK00, LLD⁺02, GK95a]. **Final** [BM16b]. **Final-State-Dependent** [BM16b]. **Finance** [KB08]. **Finding** [AO06, BCH14, CC18, DV14, DV16, EMN22, EGG09, GL10, HL23b, HLP23, KL97, Luk08, MSFL17, NR20, YP20, JBK⁺18]. **Finds** [CD19]. **fine** [Zen91]. **fine-grain** [Zen91]. **Finely** [ZT98, ZT96]. **Finite** [AA20, BER03, BD17, BBCS21, BDM16, BM16b, BRB19, CP01b, ESKL18, FG04a, GP04, Gu00, GVJ06, HBM21, HMN10, HG16, LY19, LTAP22, LV22, LYSA20, Lev00, LLS06, MNP96, MNP98, PQS01, SV07, WLLY16, Wri01, XKK22, BL93, MN93, Zha94a]. **Finite-Dimensional** [BM16b, Lev00, BDM16]. **Finite-Precision** [CP01b, Wri01]. **Finite-Sum** [HBM21, LY19, XKK22]. **Finitely** [AKS00, Sab11, ZK14]. **Finito** [LTAP22]. **Finito/MISO** [LTAP22]. **Firmly** [KL97, KT08, Tse92]. **First** [AI11, AI12, BT12, BV18a, BSTV18, BRB19, CGT12, CB14, CMV19, CS15, CSV09, DHR07, DO19b, DFR18, GLC_xY18, Gfr11, GL14b, GNS08, HM15, HS11, HN04, HZ22, LS13, LJ16, LFN18, LM23, LZ23b, MP18, OLR21, SS17, SLWY15, THG17, TDZ20, Wal08, WB16, WY03, Xu17, Xu22, YZ16, ZL22b, ZWHZ23]. **First-** [CSV09, GL14b, HN04]. **First-Order** [AI11, AI12, BV18a, CGT12, CB14, CMV19, CS15, DO19b, GLC_xY18, GNS08, HM15, HS11, HZ22, LJ16, LFN18, LM23, LZ23b, MP18, OLR21, SLWY15, THG17, TDZ20, Wal08, WB16, WY03, Xu17, Xu22, YZ16, ZL22b, ZWHZ23, BRB19]. **Fischer** [BPC11]. **FISTA** [KF18a, AD15, OP19, RC22, TBZ16, VJFC18]. **Fitting** [BP12, LM18, KSW94]. **Fitzpatrick** [BBW07]. **Fixed** [AKT17, BWW12, BPL12, BLT17, CP15, DFR07, FV07, Fie00, HYZ08, IY09, Iid13, Iof11, KL97, KT08, KRZ17, SL15, ZOB20, ZL01]. **Fixed-Charge** [AKT17]. **Fixed-Point** [HYZ08, ZOB20]. **Fixed-Size** [FV07]. **Fixed-Width** [BPL12]. **FJ** [FBM15]. **Flexible** [MIM20]. **Flow** [AHLN16, AKT17, BPT97, EB20, FG04b, KGM23, LM16, McB98, RSE18, Vil05, Bon97, RV93]. **Flows** [BC09, BGV20, BCD18b, Cas00, FHKM06, KS05a, MS18]. **FM** [LNYZ21]. **Focus** [RBDM22]. **Folkman** [BT20]. **Follower** [HF14]. **Followers** [ABDL21]. **Following** [DNSD13, Fay96, HK09, HSW14, HSK15, HY96, KJ17, LT10b, Lin08, LMO06, LSZ98, Mon97, Sim11, TDKC14, Tse97b, ZL02, AZ05, AB95, Ans96, Gon91b, Gon91a, HK06, NN91b, SG94, Zha96, dRV92]. **Food** [KS00]. **Forest** [Rot09]. **Form** [FV99, Rut17, WX19]. **Forms** [DR23, ZVP06]. **Formula** [CYZZ19, Luc95]. **Formulae** [PA19, vAH14, Fle91]. **Formulas** [CHLC19]. **Formulation** [BH19, CDF⁺94]. **Formulations** [ASZ08, BHM18b, BV10, BM18b, BMP22, GACD14, Kal18, Lu14, Lue08, RR08, WZZ18]. **Fortified** [Tse99]. **Fortified-Descent** [Tse99]. **Forward** [ATP21, ACP11a, APR14, AP16, AC18, AD15, BFO19, BPR20, BAD18, Dav15b, Gis21, LFP17, MT20, RW21, Sal17, TSP18, VSBV14, CR97]. **Forward-Backward**

[ATP21, ACP11a, APR14, AC18, AD15, Gis21, MT20, RW21, TSP18, VSBV14].

Forward-Backward-Half [BAD18].

Forward-Douglas [Dav15b]. **Foundations** [ABD⁺18, DR13, PS21b]. **FPTAS**

[HNO15, HN19]. **Fractional**

[BR19b, BGH18, BGH19, CZZ19, GL08a, Jan06, KM21a, ZL22b]. **Frames** [PC03].

Framework

[Aus99, BT12, BY11, DLM21, DW22, FFK00, FH14, GLC_xY18, GL12, GMM17, HS23, HWWY23, JBS⁺23, ND10, Pat98, Sat22, TDFC18, ZCH⁺23, AW93, FKMN00].

Frameworks [IK14]. **Frank** [BCD⁺18a, BRB19, BRZ20, FGM17, PRS16, WLM22].

Fréchet [AXY23, SPM18]. **Free**

[AB12, AB08, AO18, AO06, AD09, BTKNZ99, BBN19, BLG13, BDDM19, BFMS14, CGT12, CWH06, CSV09, CHL16, CR21, CNW10, FLLR14, GPR02, GDG22, GL10, GJT23, GKT23, HR14a, HR22, JJ15, KT14, KNX16, LLS06, LL09, LLS10, LLR16, LLRV19, LS02, MWDS18, MW09, QQ00, RSS00, hRK14, ST10, SN07, SHP18, SKL09a, SKL09b, WS11, ZCS10].

Frequencies [BBF⁺04]. **Friction**

[AA20, ABCdC23, BHKO02, BHK⁺09, Sta04, GK95b]. **Frictional** [KP98].

Frictionless [TP02]. **Fritz** [BOT06, KS10].

Fromovitz [GVJS10]. **Front** [MGGS09].

Frontier [DKVW17]. **Fronts** [BKR17].

Fulkerson [Che05]. **Full** [HHY15, MRS14, MN14, MOS14, MN16, Roo06, Roo15, CJ18].

Full-Newton [Roo06, Roo15]. **Fully**

[DN22, MARS10, ZZN18]. **Function** [AF01, AILT14, BM20a, BDMS09, BGH18,

BGH19, CGT11, CL96b, CHLC19, DL01, DW22, FS97, FBH22, GV14, GJT23, GKT23, Gül97, GLYZ14, HK06, HK09, HPW23, HN03, JPT13, Kau99, KT14, KMM23, LSW06, LY11, LL09, Men17, MST11, Ous99, PTZ05, PW06, SS05, Sch08, Sor97, SGK21, SW99, SXMW13, TF96, Ulb03, WHY⁺19, WS11, XL_xY21, YY03,

YZ10, ZZ16, FM94b, GLW91, Gon91a, JY94, Luc92, MW94, SZ92, See92, Tha93, War96].

Function-Based [DW22]. **Functional**

[CHW12, CW18, DLV10, Fay96, GNRPT16, ILR01, Xu20, Xu22]. **Functionals** [BH15, Cel07, CKS17, KKS03, Lás17].

Functions

[Abs05, AAGM22, AXY23, ABF14, AV20, AZ19, AFGO20, BER04, BDS10, BGJ12, BS19, BBW07, BNL⁺18, BBN19, BCU00, BM14, BLG13, BDLS07, BDL07, BM98a, BM98b, BW05, BU22, BH14b, BGH19, CV17a, CX99, CQT03, CCR17, CWP20, CH09, CDM20, CHY10, CT03, CGT10b, CDZ17, DHML01, DSS09, DF19, DRT17, DD19, DLR14, DMZ12, Don16, DK10, EH20, FMP18, FG04a, FB19, FH14, FB03, FGG04, FHN09, FSF12, FLT01, Fus14, Gor22, GN17, GN19, GN20, GVJ06, HLZ08, Har09, HXH22, HHY18, HP07, JMW08, JFX17, JL03, KKS03, KM09, KLW18, KMP23, Kuč08a, LP10, LMMZ21, LB18, LSS14, LS13, LN07, LN09, Li10, LN11a, LNYZ21, Lim23, LN11b, LLRV19, Loc15, LT20, LPV05, MWDS18, MZGS08, MY10, MS00, MS03, MS20, Mon23, MN13, MA00, Mur03].

Functions

[NZ01, NY05, NP23, ND09, PA19, PAV21, Pha20, Phu10, PW16, PR96, Qi99, QW20, RG00, RGY99, Sch16, See97, Sen07, SVD12, SMG14, SW07, TM15, TSP18, THDL22, TZ10, VIT22, WDST14, YZZ17, ZA14, ZFL06, ZT98, ZCT10, dBdH07, vAPA19, AW94, ACC93, BD02, CT93, GK95a, GIJT96, Li96, LS91, Luc95, MLRR93, Mar94, MS94b, PHR91, PZ94, ZT96].

Functors [Vel15]. **Fundamental**

[Dan21, HL14, SKL09a]. **Funnel** [CRS18].

Further [TSP18, Tse03, WZYB08]. **Fused**

[HL17, HL20, LST18b, YLS⁺15]. **fuzzy** [NT02].

Gâteaux [JS20]. **Game** [ABDL21]. **Games**

[ABGJ14, CCM23, GXZ21, HS23, HF14,

Hyn23, KS12, MPR10, PS11, RS11, SS23, ZSX19, vdLTY06]. **Gap** [AP14, ABW21, BT20, CM21, CW18, DO19b, FPT22, GW18, HHJL23, LN09, Nes05, WX20a, XSLZ11, YWAS17, Tha94]. **Gaps** [GSZ14]. **Gas** [ALSV18, HPU19]. **Gateaux** [Jey91]. **Gauge** [ABD⁺18, CV17a, FMP14, Lim11]. **Gauss** [Bel94, FGO14, GLN07, LN07, LWZ15, SW99, Xu18, ZC10, dPRT01]. **Gaussian** [GK99, HTY12, MWDS18, SFP11, vAH14]. **Gaussian-Like** [vAH14]. **General** [ABMS08, AKR23, AZ08, BGY⁺23, BKT99b, CMY15, CC02, CGST96a, CSV09, DEAM97, DS12, FGL⁺02, GVJS10, HA21, JBS⁺23, KR02, LL22, LRZ21, LT02, LY07, MP19, Pul97, Pul00, RT05, Ren16, SS23, Sat22, SJM21, Tse99, Wri00, YmZS15, YN17, Eck94, NS91, ZTP93, FKMNO0]. **general-purpose** [NS91]. **Generalization** [HL23a, HL17, HL20, MN09, SVD14]. **Generalizations** [AHFH16, Don12, KM21a]. **Generalized** [AINT17, ABW21, AFS01, AD03, AVS21, BDS10, BNL⁺16, BDMS09, BK21b, BHR19, BI98, BDL21, BGH18, BGH19, CDL16, CSS19, Chu21a, CY14, DJ21, DSST20, DJS13, FK10, FS17, FB00, Fra02, Gfr14, GO21, GJR08, GER23, HJB20, HSK15, HY06, JW21, JFQS98, JL19, JL20, JS11, KS16a, KKS19, KKW05, LFKCT23, LTP23, LZ13, LN09, Lie20, Lin22, LRX14, LYS17, LMZ21b, LT20, MN96, MPA21, MS21, MA00, NARS14, NTZ23, Pen00b, PQS01, PW06, PR96, QLSZ18, QY14, RC22, RPK03, Roy20, SNTI16, SFMF20, SS22, SKB18, VR05, WX19, WLKK23, WA15, XFLP21, YZZ97, ZCH⁺23, ZSL17, ZFL06, ZN07b, ZN10, ZZ16, ZÁC17, dEH01, vAPA19, DFKS11, TK96, Tre95]. **Generalizing** [KF18b]. **Generate** [BKR17]. **Generated** [Fay02, FG04a]. **Generating** [BS19, BTT96, BGP09, Boy93, DD98, KLT07, Lov11, LPV05, MP14b, NS21]. **Generation** [DKLM22, LS98b, RADK05, RR08, Mit94, Ye92]. **Generic** [BCS21, DIL16, GL12, HS19, JS97, KYYZ22, LP17, Lev04, LMH19, PW16, SS15, Zas00, JSV91]. **Genericity** [ABDL21]. **Genuine** [YF00]. **Geodesic** [Per23]. **Geolocation** [RM08]. **Geometric** [ATU23, DSP10, GM12a, GLY12, GYZ14, HL08b, IdW16, NOS17, SDR20, SH15, JSC95]. **Geometrical** [CN17, KKT20]. **Geometry** [ANRV04, AL14, BO17, BWW12, BGH18, CM10, DV23, Fre03, Las09, MW97, Peñ00a, RFB⁺11, ST10]. **Given** [Chu21a, HP07]. **Global** [AAGM22, AKS00, Ani05a, BBW05, BT00a, BCS21, CCM23, CKS15, CX99, CC99, CLL23, CMV19, CGST93, CSV09, CR04, DY99, DEAM97, EA99, FLT02, FGL⁺02, Ger08, Ger11, GN92, GR10a, GS07, GH15, HPU19, HP09, HL98, Hu07, HMP⁺08, ISU12, JLL09, JLLP16, JSC95, JL05, Kan96, Las01, LL00, LS13, LF01, Li10, LP15b, LMZ15, Lov11, LS02, LSL08, MS11a, Mis23, MT98, MW97, NLZ10, Nga15, NRS21, QWY04, Rag13, RKG08, Sch06, SK06, SZ98, TWB⁺03, TM95, VGO18, VIT22, VS08, Vui14, WB05b, WS11, Wu96, XB99, Yin99, Zha00, ZL22a, ZC10, And96b, BKT99a, BD93, GIJT96, Hen95, RS94, RD95, Ser95]. **Globalization** [MU14]. **Globally** [AP21, BV18a, CH16, EW94, FHIS16, FS05, FQ96, GR14, GKV03, LT02, QQ00, SS00, Sva02, WX19, Wat00, WBME14, ZOB20, ZL03, CH93b, Li93b]. **GM-Based** [MNR⁺22]. **GMRES** [FP97, SAW99, ZW18]. **GMRES-Accelerated** [ZW18]. **Golden** [CYZ22]. **Gomory** [AL14, Mas20]. **Good** [BS19, LL00]. **Goodness** [Che01]. **Governed** [AL20, DST23, Voi08]. **GPS** [BP12]. **Gradient** [AA20, AFC22, AT06, AFGO20, Bac15, BC09, BPS15, Ber97, BT00b, BMR00, BHG07, Bla21, BSTV18, BB23, BCD18b, BSR17, BLO05, CWW18, CD19, CERS18,

CMSZ20, CLL23, Chr20, DHL⁺99, DY99, DK13, DSK20, DGT20, ET19, ES22, Far20, FLP19, GH16, Gar21, GOP17, GOP19, GP19b, HZ05, HZ14, HL23a, Har14, HKMS20, HZZC22, HR12, HR14b, HU17, HU19, HY15, IY09, JBS⁺23, JST12, JZZ20, KF18b, Kiw07a, Kiw10, LZ16, LZ18, LRZ21, LOZ23, LTAP22, LJ20, LS22, LT21, LM21a, LLX15, LX23, LM20b, LM23, MPTD21, MEV23, Mal15, MS18, MS00, MS03, MIM20, MGR18, MOP20, NYF11, NT19, Pat16, Peñ23, PP18, PW05, QQS03, Ray97, Ren96, SKM19, Sat22, SW11, Sch06, SFP11, SFMF20, SSD22, Tse98, VGO18, WWLY21, WCP17, XZ14a, XZ14b, XY15, Xu20]. **Gradient** [YWF19, YLY16, Yun14, ZC09, d⁺A08, dSTVB18, vAH14, GN92, IKR⁺91, LT93, Ort91, Tre95, Tse91, ZR93]. **Gradient-Based** [Chr20, LJ20]. **Gradient-Like** [MS18]. **Gradient-Response** [LS22]. **Gradient-Type** [HR14b]. **Gradients** [CMYZ22, DW22, GP19a, HJB20, SY18, VIT22]. **grain** [Zen91]. **grained** [DMK⁺94]. **Gram** [CWY11, JFX17]. **Granular** [ALT19]. **Graph** [GHR14, GSZ14, GL08b, LOZ23, LP15a, LV22, PVZ07a, PR07b, SM99, SAZ22, SL14, dP02, MOT95, PR95]. **graph-bisection** [PR95]. **Graph-Structured** [SAZ22]. **Graphical** [CH17, CHN18, CHNT21, LS21, YLS⁺15, ZZST20]. **Graphs** [AP22, BDPX09, Dah99, HL11, MRT15, Mut01, NOS17, Pan19, SS22, WPD22, HP94]. **Greedy** [RN21]. **Grid** [AHLN16, CP01a, PMDL10]. **Grid-Based** [CP01a]. **Grids** [BV10, PC03]. **Gröbner** [Spa14]. **Group** [BHKM14, CDR22, DW10, FdOF07, GH15, LBT22, Lin22, YST14, ZZST20]. **Grover** [BBW05]. **Growth** [Ani00, CHNT21, CDZ17, DL13]. **Guarantee** [WZZ22]. **Guaranteed** [HZ05, MP19]. **Guarantees** [BdHP21, CCF⁺20, Cri22, CRRW21, DSK20, HL23b, HLP23, Lin22]. **Guided** [DG19].

Hadamard [Bac14, LBH22, Rev97, WLLY16]. **Haeberly** [KSS99, LM05]. **Hahn** [DGLM14]. **Half** [BAD18, ET07]. **Half-Strips** [ET07]. **Halfspace** [Pan16]. **Halfspace-Quadratic** [Pan16]. **Halpern** [DP23]. **Halpern-Mann** [DP23]. **Hamiltonian** [DJ21, HMJ⁺23]. **Hamming** [MP10]. **Han** [PB17]. **Hand** [GST11, Gre00, HCH12, KRT07]. **Handling** [AB08, EL10]. **Hard** [PW19, RK19, TSAKN23]. **Hardening** [HMW13]. **Harnessing** [BIM23]. **Heavy** [AL21, ADR22, JBS⁺23]. **Heavy-Tail** [JBS⁺23]. **Hedging** [BCD⁺18a, ZSX19]. **Helmberg** [Sim11]. **Hemivariational** [HKK11, LMZ21b, MS11c, ZML21]. **Hermitian** [Lew96]. **Hessian** [Har14, AA20, AW00, BNS95, BMSS19, BCNN11, CK99, Fle95, GL01, GL03, Gur94, LR21a, PCA19, PR96, XB99]. **Hessian-Driven** [AA20]. **Hessians** [BDS10, GN17, LZ13]. **Heterogeneous** [TE19]. **heuristic** [BH95]. **Heuristics** [BMZ01, RK19, SM99]. **Hidden** [WLZY07]. **Hierarchical** [BGG⁺12, Cab05, lid12, Mut01, Zha94a]. **Hierarchies** [BR23a, Don14, FSP15, Las14, LV22, Slo22, dKHL17]. **Hierarchy** [BMP22, JM18, KTT15, LMMZ21, Mas20, WML21a, WML21b, dKL11]. **High** [AP18, BGM⁺16, CGRV21a, DN22, HPW23, Lin08, Mar17, Mas20, Nes21, Pap17, SJM21, Bon97]. **High-Degree** [Pap17]. **High-Dimensional** [AP18, HPW23]. **High-Order** [BGM⁺16, CGRV21a, DN22, Lin08, Nes21, SJM21, Mar17]. **Higher** [BL22, CLMS93, GN20, KT18, MN09, Pen17]. **Higher-Order** [BL22, GN20, KT18, Pen17, CLMS93]. **Highly** [LST18a, SS22]. **Hilbert** [Alv04, BK21b, BI98, DLW99, ES22, FI08, GP19a,

IK96, KS91, Kup96, LN02, LJ02, Luk08, RW16, Rut17, SO21, Sha94, WyW04, Zas10]. **Histograms** [BGV20]. **Hoffman** [AC02, BT96, CCP22, LL94, Zua03]. **Hold** [CU99]. **Hölder** [GN17, GN20, LP22, LM12, SJM21, WLN23, ZN15]. **Hölderian** [MN14, Vui14, ZZN18]. **Homogeneous** [And00, Chu03, HLNZ08, LSTZ07, MZH20, NV99, O'D21, SLWX23, Yos07]. **Homotopies** [GLM98, Wat00]. **Homotopy** [Bil02, BW02, SAW99, WBME14, XZ14a, IKR⁺91, Naz91, RHW93]. **Homotopy-Based** [Bil02]. **Horizon** [BZ08, Gha23, HG16, LS21, XA18b]. **Horizontal** [Pot14, Zha94b]. **Horn** [CC18]. **Hot** [JKW15]. **Hot-Starts** [JKW15]. **HPE** [AMS16, GMM17, HM16]. **HPE-Type** [AMS16, HM16]. **Huber** [LS98a]. **Huge** [Nes12, NS14]. **Huge-Scale** [Nes12, NS14]. **Hull** [CG17, DLW99, DMS22, LRO05, LW08, SD20a, SPW15]. **Hulls** [HN09]. **Human** [SBD⁺11]. **Hybrid** [AFC22, Alv04, CERS18, MS10, MS14, MSS15, NT06, Xu18, ZC10]. **Hyperbolic** [BDSS22]. **Hyperbolicity** [NT16]. **Hypercube** [Mar05, dKL10]. **Hypergeometric** [dKLS15]. **Hypergraph** [BLS21, HL08c]. **Hypergraph-Based** [BLS21]. **Hypergraphs** [DK18]. **Hyperpath** [DP00]. **Hypersurfaces** [YmZS15]. **Hypotheses** [GKS18].

idea [SZ92]. **Ideals** [GPT10, MEV23]. **Identically** [dM08]. **Identification** [AY08, BRB19, Cri22, FFK98a, FFK00, LT10a, LFP17, OW06, TW14, KSW94]. **Identifying** [DKL21, DSS09, LW11b]. **Identities** [HJB20]. **II** [AW93, CLMP10b, Fre95, GL14a, GLT97, Gon91b, KLL22b]. **III** [IT18]. **III** [JZZ20, Ver96, Wri98]. **Ill-Conditioning** [Wri98]. **Ill-Posed** [JZZ20]. **Ill-posedness** [Ver96]. **Image** [BC05, JS00, PR07a]. **Images** [FBO21, GdW00, MHL15]. **Imaging** [CERS18]. **Impact** [MCL10, Dix91]. **Impatient** [BRB19]. **Imperfect** [JS16]. **Implementable** [FT02, FT07]. **Implementation** [LNP98, MÓ09, PRRL97, XS99, Meh92, RV93, YG91]. **Implementations** [SAW99]. **implementing** [LMS92]. **Implications** [BHR19, MS14]. **Implicit** [CK00, GAP08, GO16, WLKK23, Xu06, GK95a]. **Imply** [BBCS21]. **Importance** [MWDS18]. **Improved** [AMS16, Ans02, DK13, DL01, GMM17, HL08c, HXLT23, KS10, Lin22, PH18, Ric11, Roo15, dKP12, dKHL17]. **Improvement** [CHLZ12, LUZ15, OR16]. **Improving** [CT12, DIMS18]. **IMRO** [KV17]. **In-Face** [FGM17]. **Inaccurate** [LM19]. **Including** [ASSS23, FK00, GJT23, ISU12, Kiw07b, dCST19]. **Inclusion** [CT13, GY20, MS12, VJFC18]. **Inclusions** [ACN15, ACS14, AMS16, BCL07, BH14a, BAC11, BAD18, BAR21, CDL16, Com14, DST23, DR01, KRT07, Lev04, MT20, Mor07, RW16]. **inclusive** [WZ95]. **Incoherence** [CSPW11]. **Incomplete** [PCA19, TY11, WX20b, MP95]. **Inconsistent** [KCS97]. **Incorporating** [Ren95, VD06]. **Incremental** [Ber96, Ber97, BHG07, GOP17, GOP19, IH14, JRJ10, Kiw04, Mai15, MER18, MGR18, NB01, ND10, RNV09, Tse98, VGO18, vAF18]. **Indefinite** [HLNZ08, LST16, SW95, VZQD17, ZX99]. **Independence** [Pfl10, Hei93]. **Independent** [BGN22, PR20, TSAKN23]. **indices** [CH94]. **Individualized** [QCLP19]. **Induced** [GNS08, CJ18]. **Inducing** [CDR22, GG18b]. **Induction** [KKT15]. **Inequalities** [AB18, ABCdC23, AM00, AKT17, ACP11a, ACL99, AC02, Bar96, BTN02, BP05, BL22, CHS06, CWZ12, CW14, CS22, CSW12, CK99, CDM20, CH15, DG09, DEAW99, DMS22, DLV10, DR96, FFK98b, HMN10, HNE16, HR12, HR14b, Hu07, HZ22, HYY16,

IJOT17, IJOT19, KS19, KRS11, KK05, KLL22a, KLL22b, Li97, LNS00, LN05a, LMZ21b, Lu14, LSW20, MZH20, MSFL17, Mal15, MZ98, MS11c, MS12, MSS15, MO07b, Nem04, NV99, PvZ07b, Rob07, SSN04, Stu00, Tse97a, WyW04, YL11, ZML21, ZN04, ZN05, ZW12b, ZM96, Zua03, MZ00].

Inequality

[AT00, AVS19, BT04, Bet19, BDL07, BI98, BD10, CCP22, CLMP10a, Car23, Ceg15, CMY15, Chu18, Ded00, Den97, DK10, FM97, FHN09, HKK11, JLL09, KY21, LN02, LNP08, LN09, LN14a, LN18, LNYZ21, LMQ23, LL09, LB00, MP97, NY02, NTA04, Qi99, QQ00, RG00, RN98, SU14, SU15, SZ98, SW99, TF96, TAW06, Xu19, YLQ03, Ye00, ZL01, BCT93, GLT97, LT92, Out94, Rot92, TK96].

Inequality-Constrained [FM97, RN98].

Inertial [AA20, Alv04, APR14, AC18, ACR19, AL20, BDL23, CMY15, CG17, MM08, SDR20, Val20, YT22]. **Inexact** [BGMT19, BLPP16, BPR20, BFMS14, BM20b, BD10, BCWW20, BCN08, CJRW14, CH16, CW23, DGT20, DNSD13, FS12, Gon14, Gui20, GMS21, HV01, HZ06b, IPS03, IS10, JST12, KMM19, KM21b, KMM23, Kor00, LST21, LMH19, LX23, LR21a, Nes21, Och19, OSS11, PLS08, QGD18, RC22, SOT09, STY16, TN21, TDKC14, VSBV14, Wal08, WLN23, YT22, ZPR00, ZU11, Zie14, vAS14, CGST93, EW94, Man91, Zhu96].

Inexpensive [CGT20]. **Infeasibility**

[And00, ALSV18, BBCS21, BG08, BCW14, BCN10, PR20]. **Infeasible** [GR10c, Kor00, KR03, LMO06, Mia96, MKT95, Peñ00a, PS97, PS98, Ran06, Roo06, Roo15, SS05, SP97, Sim11, SS97, Tse97b, Tse02, BF96, Fre95, MW96, Pot96, Wri95, Zha94b].

Infeasible-Interior-Point

[Kor00, PS97, PS98, Ran06, SP97, SS97, MKT95, MW96, Pot96]. **Inference** [WPD22]. **Inferred** [BCM03]. **Infimal** [IT18]. **Infinite**

[BHKM14, BZ08, BHT16, BK10, BCT19,

CLPT99, CKLP07, CLMP10a, CLMP10b, DW10, ESKL18, FLN10, FS08, Gha17, GRS21, Gha23, GJLVP14, GVJS10, Gür10, HW10, HMN10, HLL98, Jey03, JJ15, JS97, JS11, Kan14, KTSB21, LNS00, LN05a, LN05b, LNP07, LN14b, LMP⁺18, LFW98, LW08, LV19, MRS16, MP14a, MLLB08, OHF12, Pap17, PAV21, PQS01, RSE18, ST09, WY15, ZWL10, vAPA19, CCP22, CKL⁺14, CODL22, CHY10, CLPA21, GHS95, GJR08, JRW94, KN93, Kup96, LZH14, MN13, NKT10, NLQT06, RPK03, VR05, ZY07, ZW12b].

Infinite-Dimensional [MRS16, Kup96].

Infinite-Horizon [BZ08, Gha23]. **Infinity** [JL23, LSS22, AB95]. **infinity-norm**

[AB95]. **Information**

[BCNN11, DG20, GSG12, JNN21, JS16, LR21a, PCA19, RP12, WX20b, ZJS18, Ser95].

Inner [GHKL17, KMM23, NS21].

Inner-Outer [GHKL17]. **Input** [MS18].

Inscribed [Ans02]. **Insensitivity** [Pat16].

Installation [SCRS00]. **Instance**

[AADD09]. **Instances** [PR07a].

Instationary [HH06]. **Integer** [AH10, ADE⁺18, AWW09, BHM18b, BCWP21, BZ04, BDDM19, BEET12, BCD⁺18a, BG22, BMW10, BDPP14, BHS15, BDL⁺16, BR21, BV06, CF01, Chu21a, DLM21, DO06, DHL15, DENR20, Del19, Din98, GMSS17, GNS08, Góm21, GAD20, GNL11, GACD14, HPU19, HAN11, KPZ19, LSW06, LM20a, LU97, MR10, MDV12, MW06, NS21, NRS21, RvdVH15, RSvdVH16, Sch96, ST03, WX17, ZK14, Boy95, Eck94, KM19].

Integer-Linear [DHL15]. **Integral**

[CBFG23, FRMP18, FGM12, HKP18, LRP16, MPA21, Zha96]. **Integrality**

[DLR14, GSZ14, GW18]. **Integrals** [FBH22].

Integrands [TPF22]. **Integrated** [LL00].

Integration [BD02]. **Interconnecting**

[XLD99]. **Interdiction** [DRT17]. **Interior** [AY08, Ali95, AHO98, AB08, AGJJ00, AT06, BER03, BER04, BHHK00, BCW08, BP97,

BHN99, Cas00, CM11, Chu09, CO12a, DIPR20, DT98, EAV10, FFK00, FM03, FG98, FGG07, FKS02, GSU21, GLY96, GS98, GG03, GG08, Gon14, GLTP98, GLHZ11, Gor22, GOST01, GMO14, GK96, Gu00, GR10c, IS10, JKZ98, JR10, KSH97, KSS99, Kor00, KU15, LM02, LR10, LLCN06, LT10b, LS04, LM05, LY07, McS96, ML05, MÖ07a, MÖ09, Mia96, Mit00, MT03, MOT04, NS98, NT98, NT16, NWW09, PC08, PRT02, Per23, PS97, PS98, Pot08, PS10b, Pot14, RB05, RB18, Ran06, Roo06, Roo15, SOT09, Sch98, SP97, SSK98, Sim11, SS97, SZ98, TWB⁺03, Toh00, Tse02, Wri98, Wri99, Wri01, YY03, YT02, YW02, Yos07, Zha98a, Zha98b, dKV16, BF96, CLMS93].

interior [CL96a, Gro95, HRVW96, JS95, JY94, KKM93, LMS92, McS94, Meh92, Mit94, MTT94, MKT95, MW96, NN91b, Pot96, SM91, SG94, TZSW96, Tod92, Wri92, ZTD92, ZTP93, ZT93, Zha94b, ZL03].

Interior-Point [AHO98, AB08, BER03, BER04, Cas00, Chu09, CO12a, DIPR20, EAV10, FFK00, FM03, FKS02, GSU21, GLTP98, GLHZ11, GMO14, Gu00, GR10c, IS10, JKZ98, KSH97, KSS99, LR10, LS04, LM05, LY07, McS96, ML05, Mia96, MT03, MOT04, NS98, NT98, NT16, PRT02, Per23, Roo06, Roo15, SOT09, SSK98, TWB⁺03, Tse02, Wri99, Wri01, YT02, YW02, Zha98a, BF96, HRVW96, JS95, JY94, LMS92, McS94, MTT94, TZSW96, Tod92, Wri92, ZTP93, ZT93, Zha94b, ZL03].

Interiors [BP07]. **Interpolants** [Pap17]. **Interpolation** [CRY99, DQQY02]. **Interpretation** [Hen15, JSC95, Lag93]. **Interpretations** [GG18b]. **Intersecting** [BM16a]. **Intersection** [ABP18, BBW18, BSW23, CST19, DD98, DLW99, LL23, LH04]. **Interval** [BTN02, MS11a]. **Intervals** [Lu14]. **Intrinsic** [BH19, KFGT21]. **Invariance** [GY23, GHRT98]. **Invariant** [BM07, LOZ23, Peñ23, Sen07, dGJ18].

Inverse

[ABCFR20, BSTV18, BSR17, BR21, BH15, CCM20, ET19, FKP10, HH96a, Kal18, IK92].

Inverse-Adjusted [CCM20]. **Inverses** [CNQ97, XFLP21]. **Inversion** [BLMH06]. **Investigation** [LM16]. **Investment** [RS15]. **Invitation** [Iof09]. **Involutivity** [Lim23].

Involving [CDR22, Jey03, Ni05, WJ00, GIJT96].

iPiano [Och19]. **IPMs** [CN17]. **IQN** [MER18]. **Irreducible** [HL02]. **Isoda** [HSK15]. **Isoda-Based** [HSK15]. **Isolated** [DSZ17]. **Isotone** [LU97]. **Isotonic** [HL17, HL20]. **Issue** [DR07]. **Issues** [FP98, GR10b]. **ISTA** [TBZ16]. **Item** [BHT16, BT19]. **Items** [EL10]. **Iterate** [JNN21, MPP⁺17]. **Iterated** [AL14, QGD18, Bel94]. **Iterates** [Abs05, FIS20, MS10, Man91]. **Iterating** [BC03]. **Iteration** [AZ05, AMS16, DP23, GMM17, HY15, HY96, KMM23, LT10b, LM21b, LZ23b, MT04, MS12, MS13, Pot14, XY15, Yun14, GT92, McS94].

Iteration-Complexity [AMS16, GMM17, LM21b, LZ23b, MT04, MS12, MS13].

Iterations [BLT17, CP15, CG17, DFR07, ZOB20, Ans91]. **Iterative** [BTC08, BCWW15, CGRV21b, Ceg15, CH02, EGG09, FGG07, HN07, Iid12, KS12, KRS11, KF18a, LMO06, Toh03, ZM96, Kan96].

Iteratively [Bec15, BDMS09, FRW11].

J [MZ00, QW01, ZT98]. **Jacobi** [ULC20]. **Jacobi-Type** [ULC20]. **Jacobian** [DSST20, HHY15, KP99, Xu18]. **Jacobians** [CNW10, Nau02, Wal08]. **Job** [BLS21, CKL97, AEGS93]. **Job-Occupancy** [BLS21]. **John** [BOT06, KS10]. **John-conditions** [KS10]. **Johnson** [Che05]. **Joint** [JHR23, Las10, XA18a, vAS14]. **Jordan** [Fay06, GJ17, LT20, RSS14, See22]. **Jordan-Algebraic** [Fay06].

Kalman [Bel94, Ber96, Pat16].

Kalman-Based [Pat16]. **Kantorovich** [BGV20, FS17]. **Karmarkar** [Ans91, GV94, JY94, Lag93]. **Karp** [DHL15]. **Karush** [HSS93, KT18, Pan94, QQS03]. **Kenderov** [AG14]. **Kernel** [BER04, LR10, NK10, Slo22]. **Kernel-Based** [LR10]. **Kernels** [KdK23]. **Kink** [GW19]. **KKT** [BDdSM15, BH19, BGM⁺16, BKMW20, DZ14, DFKS11, FBM15, FG04b, LFJ⁺11]. **Klee** [CHPA16]. **Knapsack** [BHT16, BT19, CCLW14, CDL14, FMW96, GLHZ11, MP14c, PW98, RQMG12, Boy93]. **Knapsacks** [AH10]. **Knopp** [PV23]. **Knowledge** [Man04, SFP11]. **Knowledge-Based** [Man04]. **Known** [Pot14, EM91]. **Kojima** [Sim11]. **Korkin** [PvZ07b]. **Korpelevich** [MS11c]. **Kronecker** [Ans17]. **Krylov** [ABCFR20, BS94, ML05]. **Krylov-Subspace** [ABCFR20]. **Kuhn** [HSS93, KT18, Pan94, QQS03, ACS14, VR05]. **Kurdyka** [LMQ23, QP23]. **Ky** [DV16].

L1 [ZYP21]. **L1/L2** [ZYP21]. **L2** [ZYP21]. **Labeling** [BBF⁺04, vdLTY07]. **Ladders** [BCQW95]. **Lagrange** [AAS17, FIS20, GJ99, JLD03, JS20, MS19, NWXYZ21, Sha97, Tre95, Trö05, WJ00, ZN07a]. **Lagrangian** [AXY23, ABMS08, ASS18, AKR23, AT00, AI12, BCD⁺18a, Bom15, BTZ92, CGST96a, DL01, DNSD13, FLN10, FK00, FS12, FS05, FKS02, GAD20, HS21, HHY15, HLP23, HFD16, HY02, IK96, ISU12, KS16a, KS19, KKW05, Kiw07b, KMM23, Las14, LT02, LSW06, LST18a, LST20, LZCW23, LST21, LZ23b, LSL08, MZGS08, NTA04, Ous99, PR93, ST22, SFMF20, Sta04, WDLW23, YH01, ZST10]. **Lagrangian-Based** [ST22]. **Lagrangian-Dual** [MZGS08]. **Lagrangians** [BR07, DFS03, SLM05]. **Lanczos** [GLRT99, JW21, SY19, ZSL17]. **Landscape** [LSS22, LXB19]. **Landweber** [XC21].

Language [FFG99]. **Laplacians** [GHR14]. **Large** [AZ05, ABCFR20, AT03, BBN14, BER03, BYZ00, BH03, BKT99b, Bou97, BHN99, BHNS16, CB14, DGN12, DNSD13, FJS98, FLP02, FP97, FB19, FM97, For05, GMS02, GL03, GR94, Gon91b, Gon91a, Gon99, Gou99, GST11, HZZC22, Ios01, JST12, JS00, JM18, KKM93, LNP98, LT10b, LM21b, Lie20, LM99, LRR98, Mai15, NLQT06, NW12, Ove92, PS97, Pyt98, Ray97, RSS00, SD00, Sor97, TK02, Toh03, Wan17, WG10, XS99, YCST22, Zha98b, ZLCL21, AM94, BNS95, BKT99a, Dun93, GMR91, GT92, MT91, NN91a, RD95, dRT92]. **Large-Scale** [ABCFR20, AT03, BBN14, BYZ00, BHN99, BHNS16, CB14, DGN12, DNSD13, FJS98, FM97, GMS02, GL03, Gou99, HZZC22, Ios01, JS00, LNP98, Lie20, Mai15, NLQT06, NW12, Pyt98, RSS00, SD00, Sor97, WG10, XS99, YCST22, ZLCL21, GR94, Ove92, AM94, BNS95, BKT99a, GMR91, RD95]. **Large-Step** [PS97, KKM93, GT92, dRT92]. **Large-Update** [BER03]. **Largest** [DV16]. **larvicide** [CD92]. **Lasserre** [GSZ14, JM18, KS18, dKL11, dKHL17]. **Lasserre-Type** [dKHL17]. **Lasso** [HL17, HL20, LST18b, LST18a, LLST19, YST14, YLS⁺15, ZZST20, TBZ16]. **Last** [JNN21]. **Lattice** [ALT⁺21, BDDM19, HW07]. **Lattice-Free** [BDDM19]. **Lattices** [MS06b]. **Layer** [KRZ17]. **Layered** [MT03]. **Layered-Step** [MT03]. **LCP** [AZ05, Gon99, McS96, MW96, PS97, PS10b, Pot14, SP97]. **LCPs** [Lin08, ZL03]. **Leader** [ABDL21, HF14]. **Learning** [AAJN16, APX17, BH15, BCNN11, HHP18, HP18, HZZC22, KP22, KB08, KLL22b, LZCW23, Mai15, NK10, PTJY10, SY13, WLM22, ZCH⁺23]. **Least** [BBT06, Bec15, Ber96, Ber97, BDMS09, BCWW15, CGT14, DLR16, FRW11, GLT04, GLN07, GSW97, HL98, KV17, Lin08, LV08, RM08, SM18, STY16, XZ14a, ZCD00,

ZCS10, ZL02, ZC10, vdBF11, Dax92, Hei93, Hus94, KSW94, WZ95, YY95].

Least-Change [HL98]. **Least-Squares** [CGT14, GLT04, XZ14a, ZCS10, vdBF11, KSW94]. **Legendre** [See92]. **Leibniz** [MPA21]. **Lemma** [BT20, DGLM14, Bar08]. **Lemmas** [FLN10]. **Length** [HSW14, MBW09]. **Level** [ABMS08, BGN22, BDM16, BM16b, Chr20, DMZ12, Fre03, LST18b, LNS18, SXMW13, ACC93]. **Level-Independent** [BGN22]. **Level-Set** [LST18b, LNS18]. **Levenberg** [Kiw96]. **Levitin** [HY06]. **Lexicographic** [RT19, ZÁC17]. **Lift** [BZ04, BV06, Che05, Lau01]. **Lift-and-Project** [BV06, Che05, Lau01]. **Lifted** [AD10]. **Lifting** [BP15, KN20]. **Lifts** [FSP15]. **Light** [LTP23]. **Like** [AVS21, BR19a, MS18, PC08, QZ08, Teb97, ZCD00, vAH14, AM12, AH19, CT93, CGT10b, YY95, YY23, AL20, BJKJ17]. **Limit** [GKS18, GHNS19]. **Limitations** [Sau20]. **Limited** [BB19, GL03, GST11, HZ14, MN00, NN91a, ZNB⁺93]. **Limited-Memory** [BB19, GL03, ZNB⁺93]. **Limiting** [GS01, LM04]. **Line** [BCS21, BLPP16, Cri22, DK13, HZ05, HA21, HHY18, IJOT19, MW94, PS20, RW18, SU15, WB05a, WB05b, WG10, YPL21, ZH04, dBdH07]. **Line-Search** [RW18, SU15]. **Line-Search-Based** [BLPP16]. **Linear** [AAGM22, AB08, Ans99, AH16, AC02, BER04, BC09, BK12, BGJ12, BBW07, BWY10, BM20a, BSW23, BTN02, BLRS22, BZ08, BGW07, Bol14, BG22, BR21, BD09, BCWW15, BCD20, BGNW05, CT13, CCP22, CLPT99, CLPT06, CLMP10a, CKL⁺14, Car22, CB00, CX99, CY00, CX08, CB14, CLYZ22, CCH05, CSW12, CC14, Chu16, Chu18, CGST96a, DF19, DIPR20, DO06, DHL15, DKS22, DY04, DK10, DS12, EAV10, Ent96, EF02, FCF07, Fay96, Fil99, Fle12, FBO21, FM97, FV99, Fre03, FHN09, FT02, FT07, GS21, GB22, GRS21, GCPT18, GLT03, GLdS05, GJLVP14, GNS08, GT97b, Gor22, GS07, GST11, Gre00, GK96, GNRPT16, Hab98, HS21, HW10, Hen15, HNE16, HLL98, HL08b, dMM10, HZ06b, HMP⁺08, HY96, HY16, IPRT00, Ios01, JRT97, Jan04, JR08]. **Linear** [JL20, KFF09, KH05, Kea11, KLW18, KFGT21, KM21a, KSH97, KSS99, KRZ17, Kor00, KTSB21, LLS05, LW11a, LMT09, Las14, Lau01, LP15a, LTY12, LYSA20, LR10, LLAN22, LN05b, LNP07, LN14b, LMP⁺18, LST20, LM20a, LNYZ21, LFP17, LFW98, LMZ15, LP06b, Lov11, LM05, MSFL17, MNP96, Man04, Mia96, MN96, MGR18, MT03, NS14, NY02, O'D21, OF03, PS10a, Pan05, PS21a, Peñ00a, PVZ07a, PR20, PTZ05, Per23, PW17, Pot08, PW19, Pul00, QW00, QW01, Qi16, QY14, RFNP14, Roo06, Roo15, Rot92, RP12, Sch16, Sch98, She14, SYZ19, SW14, SW15, Sim11, SS97, SL21, Stu00, SZ98, TBZ16, TN21, TAW06, THZ23, WLWY15, WLLY16, WX17, WX19, WLKK23, WLS23, WBME14, WCP17, Wri99, XS16, XA18b, YLQ03, YT02, YW02, YM14, ZCH⁺23, Zha98a, ZC09, Zha98b, ZL02, ZL12, ZK15, ZN05]. **Linear** [ZN08, ZN14a, Zua03, dSTVB18, AB95, Ans96, Bar93, Bos93, CH93a, DL91, DG23b, Fre95, GLT97, GV94, Gon91b, Gon91a, GT92, Gow92, Kan96, KSW94, KK92, KKM93, Lag93, Li93a, LS98a, LMS92, MN93, Man91, McS94, MS94a, Mit94, MKT95, Naz91, O'L95, Pot96, Pow95, Ren95, SG94, Tod92, Tre95, TM95, Ver96, ZTD92, ZT93, Zha94b, Zha96, ZR93, Zhu95, dRV92]. **Linear-Quadratic** [BGNW05, HS21, LTY12, PW17, XA18b, ZR93, Zhu95]. **Linear-Time** [JL20, PW17, SL21, WX19]. **Linearization** [DLR17, KLLM22, KRR99, RQMG12, Vel15]. **Linearizations** [Kiw06, Kiw08]. **Linearized** [HLY16, LM16]. **Linearly** [AFS14, Bom15, BMSS19, BP97, CPRZ20, DGN12, Fle14, FS05, GH16, Gou99, JST12,

KLT07, KMM19, LT00, LT10a, LST16, LCPS20, LLC22, LLS06, NR20, PC03, QLSZ18, Xu17, Xu18, ZL20, ZC20, ZL22a, FMS94, NN91b, Wri92]. **Linesearch** [ATP21, CYZ22, DO19a, FLLR14, MP18, TSP18, Mel96]. **Linesearch-Based** [FLLR14]. **Link** [BO17, SCRS00]. **Link-Installation** [SCRS00]. **Linked** [DW11]. **Links** [MS03]. **Lipschitz** [BR19a, BNL⁺18, BSTV18, BM98a, BM98b, CLP16, CDM20, CGT10b, Gri19, HHY18, KK05, LTAP22, LS13, LM23, Mon23, NT06, Nem04, NT02, QZ08, RW16, RS96, SK06, VIT22, YY23, ZC20]. **Lipschitz-Continuous** [NT06]. **Lipschitz-Like** [BR19a, QZ08, CGT10b, YY23]. **Lipschitzian** [BC14, CTW19, CS15, GO16, KK02, MN13, MN14, MPA21, PHR91, War96, ZCT10]. **Liquidation** [YLZ02]. **LMI** [ZVP06]. **Load** [KS05a, SKL09b]. **Load-Dependent** [KS05a]. **Local** [ATP21, Bol14, CX99, CC99, CY99, DLT03, EH20, EM91, FS12, FLRS06, For05, GR10b, GLR15, GHS95, Gur94, HS21, Har98, Hu07, JPS99, JL23, KFF09, LYP23, LLAN22, LFP17, LM05, MS11a, Mar94, MER18, MN16, NT16, Pap16, Pha20, PR98, SB18, SLWX23, SZ98, TBZ16, TWB⁺03, WB05a, WX20a, Wri05, XFLP21, YZS19, GK95a, Ser95, Vav93]. **Local-Nonglobal** [For05]. **Localization** [BTC08, BP12, CJSY07, KKW09, KW10, Tse07, WZYB08, ZSY10]. **Localized** [RW16]. **Locally** [BNL⁺18, BDSS22, CDM20, FLY11, HHY18, LPR00, LFL09, LM23, Mon23, MOS14, QQ00, Qi16, WZZ22, ZL03, PHR91]. **Locating** [DST23, Lin08, ZL02]. **Location** [TMHP06]. **Loewner** [BBW17]. **Log** [WST10, YST14, Pow95]. **Log-Determinant** [WST10, YST14]. **Logarithmic** [JR10, TY12, GLW91, MW94]. **Logarithmic-Quadratic** [TY12]. **Logical** [BCWP21]. **Lojasiewicz** [SU15, BDL07, LMQ23, QP23]. **Long** [Sau20, SZ98, XA18b, Ans96, TM95, dRV92]. **Long-Horizon** [XA18b]. **Long-Step** [SZ98, TM95, dRV92]. **Look** [HN05, KF18a, Las11, LV08, Pat17]. **Lorentz** [Sen07]. **Loss** [DJV06, ZPXQ21]. **Lovász** [Che05, Lau01]. **Low** [AP22, BDdSM15, CGO22, CV17a, DU21, DV16, FRW11, FGM17, Gar21, GG18b, HLB20, HU19, HPW23, JBAS10, LRWW98, LYP23, LdQ11, LZSV20, LL23, LWZ15, MSFL17, MMBS14, MKU21, SU15, SL21, TY11, TQP22, Van14, WDLW23, GMS92, Tod92]. **low-connectivity** [GMS92]. **Low-Diameter** [AP22]. **Low-Dimensional** [HPW23]. **Low-Memory** [MKU21]. **Low-Order** [SL21]. **Low-Rank** [BDdSM15, CV17a, DV16, FGM17, Gar21, GG18b, HLB20, HU19, JBAS10, LYP23, LZSV20, LL23, LWZ15, MMBS14, SU15, TY11, TQP22, Van14, WDLW23, FRW11, LdQ11, MSFL17]. **Lower** [ABMS08, BDM16, BM16b, BDDM19, Chr20, CH13, CPRZ20, DLV10, FLP19, FL98, GM12a, GL08a, IdW16, Jan04, NZ01, PZ98, PRRL97, dKP12, MLRR93]. **Lower-Level** [ABMS08]. **LP** [BM18b, FHS16, Fle98, Las04, LT96, PW19]. **LP-Relaxations** [Las04]. **LQP** [YL11]. **LQP-Based** [YL11]. **Lyapunov** [CPS07, MTB23].

Machine [BCNN11, CKL97, CJK98, CP01b, KB08, LM20b, Mai15]. **Machines** [FM03, GLHZ11, DT91, Onn94]. **Maciel** [EA99]. **Made** [McB98]. **MADS** [AADD09]. **Majorant** [FGO14]. **Majorization** [Mai15]. **Majorization-Minimization** [Mai15]. **Majorized** [LST16]. **Majorizing** [LN07, WHY⁺19]. **Making** [JNN21]. **Malitsky** [BSW23]. **Malitsky-Tam** [BSW23]. **management** [CSY23]. **Mangasarian** [CX99, GVJS10].

Manhattan [MP10]. **Manifold** [CMSZ20, GSAS21, HSS93, KLW18, LMW16, LMZ21a, LCD⁺21, SH15, XLxY21]. **Manifolds** [AM12, BR23b, BH19, FLP19, HMJ⁺23, HU17, HHY18, LMWY11, LL23, LBH22, OOT22, RW12, SO21, WLWY15, WLLY16, WWLY21]. **Mann** [CG17, DP23]. **manufacturing** [AEGS93]. **Many** [Sab11, TAW06, Xu20, XLD99, ZT98, GK95a, GK94, ZT96]. **Map** [HY16, LM04, Lu14, Gow92]. **Mapping** [BH18, Bla23, FKP10, HV05, IY09, LSdZ18, TY04, GLT97]. **Mappings** [AK21, CH17, DPS17, EL09, Fay06, FBO21, Gfr11, GTdS06, JBS⁺23, KL97, KT08, LMV23, LW08, LSZ04, MPA21, NT06, Sab11, SY13, ZL01, Tse92]. **Maps** [AGH10, AG14, LPT07, LP22, LS21, NZ16]. **Marginal** [CHY10, Las10, LSdZ18, QW20, War96]. **Marginals** [HP07, TSAKN23]. **Markets** [LSF⁺23]. **Markov** [AP18, AH16, BDPX09, Gha23, GS01, HG16, NJS21, RG22]. **Markovian** [KLL22b]. **Marquardt** [Kiw96]. **Mass** [GHGHL06, MRT15, WWLY21]. **Massive** [FM03]. **Massively** [ZC91]. **Matching** [DL17, INT17, MP14b, Bar93, Gro95, Ris94]. **Matchings** [CZZ19, HL08a, HL11]. **Material** [BTKNZ99, KNX16, SKL09a, SKL09b]. **Materials** [BGG⁺12, Sta99]. **Mathematical** [ASS18, AHSS19, Ani05a, Ani05b, Bon97, BKS16, CSW15, CO12a, DFNS05, DR13, Dol20, FGM12, FLRS06, FBM15, FP98, FT02, FT07, Gfr13, Gfr14, GY17, GLY12, GYZ14, GLYZ14, GXZ17, HK09, HS11, IK16, IS08, JR00, JRS10, KDB09, KS10, KS14, KLLM22, LLCN06, LXL11, LX14, MU18, MX06, MN14, PS21b, RB05, Sch01, SU10, Voi08, WJ00, Xu06, YZ16]. **Matrices** [AT03, BDSS22, BFM98, Bur03, CHS06, DDW20, DSST20, DPW15, GMO14, JLW16, JL16, JBAS10, KSH97, KT00, Lim11, MP10, NZ16, NYZ18, SPW15, SU15, Shi18, SH15, TY11, Fle95, JYZ94, Lew96, LS91, Van95]. **Matrix** [AM12, BBN14, BQX15, Bec07, BTN02, BH15, BGH18, BGH19, CCS10, CHS06, CSPW11, CV17a, CY00, CQT03, CX08, CWY11, CCF⁺20, CSW12, Chu18, CDZ17, CNW10, DZ07, FCF07, FRW11, FGM17, GV15, GO12, HH96a, HR14a, HNE16, KN20, LdQ11, LZSV20, LL23, LWZ15, MSFL17, MN96, MOT04, MPR10, NTA04, PS97, Qi16, RO18, RFNP14, RSS00, STKI17, SI13, See97, Shi17, Stu00, SSQ04, iT17, TQP22, ULC20, Van14, Vav10, XLZH19, YPC18, ZY14, FKMN00, Gur94, KK92, Li93a, LT92, Man91]. **Matrix-Fractional** [BGH18, BGH19]. **Matrix-Free** [CNW10, HR14a, RSS00]. **Matters** [RSKW19]. **Max** [BL22, CGC15, CPS18, DGR17, DW22, GKPV01, HMJ⁺23, KNP98, KM21b, LPW23, Lau01, OLR21, PQS01, RPK03, BMZ01, RN98]. **Max-Cut** [Lau01, BMZ01]. **Max-Facet-Width** [DGR17]. **Max-Min** [GKPV01, KNP98]. **MaxCut** [dCST19]. **Maximal** [ABT00, Alv04, BGW07, BCH14, DF19, GY20, Lim23, Pen00b, Sab11, MOT95, ZT92]. **Maximality** [CM10]. **Maximally** [AL20, DST23, IPRT00]. **Maximin** [WX16]. **Maximization** [DZ07, HKMS20, WZZ22, XLZH19, DHLN92, FM94b, GMR91]. **Maximizing** [Ete22, WX19]. **Maximum** [Ans02, BCM03, BMP22, CHLZ12, HL11, LUZ15, Lim11, MPB02, Ous99, Pfe08, RK19, SW07, WN16, WPD22, YP20, ZG03, BL93]. **Maximum-Entropy** [SW07]. **Maximum-Volume** [Lim11]. **Maximum-Weight** [RK19]. **Maxmin** [HLTW14]. **may** [Wri95]. **McCormick** [BCT19, MCB09]. **McCormick-Based** [MCB09]. **Mead** [Kel99, LRWW98, LPW12, McK98]. **Mean** [ABGJ14, AP22, ACL99, CG17, MS10, OR02, ZJS18, ZFL06]. **Mean-Covariance**

[ZJS18]. **Mean-Risk** [OR02]. **Means** [Bac14, DK22, SPM18, PW07, PH18]. **Measurability** [BCCL22, CCL09]. **Measurable** [PZ00]. **Measure** [EF02, KTSB21, MPR10, NF01, SGK21]. **Measurements** [SDGM99]. **Measures** [Cal07, DMM06, ET19, ER05, EF02, GSU21, GZ17, GR12, LMMZ21, MS06b, OF03, Pic13, RR15, VD06, Ren95]. **Measuring** [Che01, DLR14]. **Mechanical** [ABT00]. **Median** [CCFP05, Cap02, HL17, HL20]. **Medians** [Bac14]. **Mehrotra** [SPT08, LMS92, TZSW96]. **Mehrotra-Type** [SPT08]. **Memory** [AP22, BB19, GL03, GST11, HZ14, KON98, MN00, MKU21, NN91a, ZNB⁺93]. **Merit** [FS97, GV14, SW99, TF96]. **Merrill** [YG91]. **Mesh** [AA06, AD06, ACD08, ADL08, AILT14, ALT19, Hei93]. **Metal** [FGM12]. **Metamodeling** [HPD14]. **Metamodeling-Based** [HPD14]. **Method** [ACN15, AZ05, AD10, ASS18, AP21, Ans98, AKR23, ANP08, ABO22, AO18, AFFG14, AP16, AF22, AD04, ADR22, AST10, Aus15, AI11, AI12, AH19, BBN14, BER03, BCL07, BJKJ17, BC05, BBG⁺20, BBTT12, BPS15, BT21, BTMN01, BNL⁺18, BGR20, BPT97, BHG07, BCD⁺18a, Bol14, BH14a, BDL23, BR19b, BSR17, BV18b, BDL⁺16, BFMS14, BM20b, BKS16, BK10, BKS96, BCN08, BHNS16, Ceg15, CNQ97, CX99, CC99, CWH06, CNY14, CMSZ20, CDM20, CY10, Chu16, Chu21a, Chu21b, CMV19, CL96b, CO12a, CR21, Cri22, Cru14, CDR22, DSP10, DO19a, DY99, DD98, DG19, DG23a, DJV06, DNSD13, DT98, DQQY02, DFR18, DLR17, Eic09, ES22, EL10, EI06, EN14, EG10, FP97, FGO14, FS17, FLP19, FHIS16, Fle98, Fle14, FDS09, FV16, FS08, FGM17, FS05, FLT03]. **Method** [GB22, Ger08, Ger11, GO21, GRW20, GRS21, GR14, GKR20, GLY96, GV00, GL15, GG03, Gon14, GKV03, GLHZ11, GDG22, GLRT99, GST05, GR10a, GR10b, GLR14, GLR15, GK96, Gri18, GR10c, HCH12, HZ05, HZ14, HMW21, HS10, HN05, HYF05, HTY12, HLWY14, HHY15, HZZC22, HL23b, HLP23, HR14a, HR00, HIK03, dMm10, HLR16, HU19, HY15, HAG18, HDL21, HR15, IH14, IK00, IK16, IJOT17, IS08, IS10, JR08, JPS99, JW21, JFQS98, JST12, JRJ10, JS00, JKW15, JBK⁺18, KN05, KS14, KKSW19, KV17, KY21, KS99, KF18b, KPZ19, KLLM22, Kiw97, Kiw06, Kiw07b, Kiw08, KSdM01, KNX16, KSX08, KMM19, KM21b, KMM23, KR03, KS05b, LRO05, LRWW98, Lau00, LM02, LF01, LSW06, LN07, LdQ11, LM12, LUZ15, LST18b, LST18a, LST20, LZCW23, LM21a, LST21, LM99, Lin08, LLX15]. **Method** [LNS18, LX23, Lin22, LZ03, LY11, LYS17, LMZ21b, Lu17, Luo97, LB00, MT20, McK98, ML05, MX06, MU14, MXC⁺19, Mis23, MER18, MGR18, MG98, MP99, MS10, MS12, MS13, MS14, MSS15, Mut01, NT06, NYF11, NS98, NC16, Nem04, NS14, NS17, NLZ10, NWYZ21, NTA04, NR20, OHF12, OG03, PS20, Pat16, PMR19, Peñ23, Per23, PS97, Qi99, QZ00, RB05, RB18, RCGR18, Ray97, Ren96, RK20, Roo15, RSE18, hRK14, SS17, SS05, SSN04, SÖ17, SO21, SOT09, SKC12, ST14, SS97, SY13, SS00, Sol07, SY19, SK98, SZ98, SW99, SSQ04, SXMW13, STY15, STY16, TY12, TWB⁺03, TZS02, TK02, Tse97b, Tse98, Tse99, WY15, WDLW23, WLS23, WG10, Wri00, WPY23, XZ14a, XZ14b, XBN20, Xu20, YY03, YF10, YLQ03, YPC18, YPL21, YL11, YZS19, Zas10]. **Method** [ZZ96, ZC09, ZWL10, ZY14, ZSL17, ZL20, ZC20, ZL02, ZST10, ZK15, ZC10, ZCT10, ZPXQ21, dSTVB18, vdLTY07, And96a, And96b, Bel94, BTB93, BTN94, BNS95, BH95, Bur92, CH93a, Dav91, Gon91b, Gon91a, HRVW96, HK92, Ius91, JS95, KS91, Li93b, LS93, LMS92, Meh92, Mit94, NN91a, NN91b, O'L95, Pow95, Ral96, RS94, SM91, SG94, TZSW96, YG91, ZT92, dRT92].

Methodology [HYZ08]. **Methods**

[Abs05, ABCFR20, ANRV04, AHO98, AMS16, ABMS08, AB08, AD19, ASSS23, ACP11b, ACR19, Aus99, AT00, AT06, AFGO20, Bac15, BSV14, BT12, BT14, BV18a, BH20, BTZ97, BBN19, BHHK00, Ber96, Ber97, BH03, BC14, BMR00, BM18c, Bla21, BGP09, BSTV18, BRB19, BBR16, BLPP16, BIS05, BK21b, Bou97, BR19b, BL22, BD10, BCGH08, BCN10, BCNN11, CC19, CDHS18, CGT10a, CGT14, CGT19, CS08a, CY00, CM11, CW14, CLO14, CLP16, CLYZ22, CN23, CV17b, CG17, CP01a, CH16, CV07, DO19a, DHL⁺99, DL15, DIS04, DGT20, DO19b, DJ21, DG23b, DN20, DN22, DR18, ET19, EGG09, FK10, Far20, FK00, FS96, FIS10, FS12, FM03, FLRS06, FM97, FG98, FGG07, Fra02, FKS02, GG18a, Gar21, GJV16, GMSS17, GL14b, GL01, GL03, GG08, GLTP98]. **Methods** [Gor22, GN17, GN19, GN20, GN23, GLN07, GST08, GMO14, Gri19, Gu00, GR12, Gui16, GOP19, GP19b, HMJ⁺23, HS21, Har98, HM15, HK06, HSW14, HSK15, HM02, HR22, HGA15, IJOT19, IS04, ISU12, JKZ98, JR00, KP99, KN02, KN04, KFF09, KS16a, KS19, KRS11, KL97, Kiw04, KSH97, KLL22a, KLL22b, LRZ21, LZ23a, LSS14, LR10, LT00, LLCN06, LP15b, LCD⁺21, LFP17, LH04, LLST19, LP06b, LLS10, LLRV19, LZ14, LJ16, LFN18, LM23, LZ23b, LRR98, LS02, LSL08, MM08, MPRW09, Mal15, MS11a, MÖ07a, MZ99, MSQ98, MB14, MOP20, MOT04, MS11c, MS14, NRP19, NB01, NO09, NT98, NV99, Nes12, NT16, Nes21, ND10, NW12, NWW17, NWW09, OSS11, PT18, PRT02, PP18, Pot08, PS10b, Pot14, QW00, QW01, QQS03, QP23, Ran06, RHL14, RZ01]. **Methods** [Ren16, RKG08, RW12, RN21, RR08, ST22, ST13, Sat22, Sch08, Sch09, SW11, SU15, Sch16, SK22, SDGM99, ST14, SBT16, SAW99, Sta04, SH97, Sva02, THG17, Toh00, Tse97a, Tse02, Tüt03, Ulb01, Ulb03, VGO18, WB05a, WB05b, WN16, Wal08,

WB16, WMGL17, WHY⁺19, WLM22, Wri98, Wri01, XXS21, XYZ15, Xu17, Xu18, Xu22, YWF19, YW02, YNS20, Yun14, ZA14, ZX99, ZCD00, ZWHZ23, ZU11, Zie14, dF09, dEH01, dKV16, dBdH07, vAS14, vAF18, Ali95, BT00b, BLN92, CLMS93, DHLN92, DT91, DMZ94, EW94, EM91, Gar93, GN92, Gil97, GW93, Gon91b, Gon91a, GHS95, Gro95, Hei96, Hus94, IK96, Kan96, KS93, Kiw96, Kup96, LN93, LP93, MS94a, Mel96, RHW93, RD95, Sar95, SC91, WZ95, Zha94b, Zha96, ZNB⁺93]. **Metric** [AAI07, AZ19, AK21, BYZ19, BLPP16, CKLP07, CCFP05, CHNT21, DL13, Fus14, Gfr11, Gfr13, KK02, LP22, LLAN22, Li97, LM12, LMH19, MRT15, MPR10, NT08, Och19, PLS08, RW21, Sal17, WLN23, ZN04, ZN07b, ZN10, ZN14a, ZZ16, ZN21, Dav91, Dix91, Sha94, ZN15]. **Metrics** [Bla21, SSW16]. **MG** [VV21]. **MG/OPT** [VV21]. **Mild** [Sal17]. **MILP** [GACD14]. **MIMO** [LLZZ19, ZLCL21]. **Min** [AP22, BL22, CGC15, DW22, GKPV01, HMJ⁺23, KNP98, KM21b, LPW23, MN09, OLR21, PQS01, RPK03, RN98]. **Min-Max** [BL22, CGC15, DW22, HMJ⁺23, KM21b, OLR21, PQS01, RPK03]. **Min-Max-Min** [LPW23]. **Min-Mean-Cycle** [AP22]. **Mini** [DR23]. **Mini-Batch** [DR23]. **Minima** [ATP21, DY04, JL23, KK02, LYP23, Lev00, LMWY11, LMP⁺18, ZY07, GK95a]. **Minimal** [CBJF97, GU22, IT18, LB18, MM05, RO18]. **Minimax** [BB23, BR19b, JL18, KB08, Lás17, LLS06, QZ08, SA04, THZ23, ZT98, ZLTD22, CL92, ZT96]. **Minimization** [AAJN16, AGJJ00, AFS14, Att96, ARS07, APR14, Aus10, AST10, BIM23, BTC08, BBTT12, Bec15, BGR20, BLP23, BCN19, BDPP14, Cab05, CGT11, CGT12, CWZ12, Che15, CP08, CGST96b, CDR22, DD19, DK10, EG10, FRW11, FM97, FQ96, FLT03, Gar21, GPR02, HYZ08, HKMS20, HK06, HR12, KKS03, Kal18, KF18b, KL10, Kiw97,

LW11a, LTAP22, LTY12, LT99, LT00, LT10a, LLX15, LBP20, Lu17, Mai15, MST11, Mut01, MW06, NC16, Nes05, PHR91, PY97, QWY04, Ray97, RHL14, RW21, Ric11, Sch16, See22, ST14, SV07, SFMF20, Sol07, Sor97, SBFA17, TDKC14, TDFC18, Tse02, WLS23, WCP17, XLxY21, XLZH19, XFLP21, YZ03, ZYP21, ZX99, ZCS10, ZL20, ZL12, dGJ18, dKL10, BT94a, CT93, CL96a, Dav91, FMS94, Gül92, LT93, TK96, TYF96, Vav93, Zhu96].

Minimize [CKL97]. **Minimizer** [For05, KPV18, WX20a]. **Minimizers** [AZ19, BGM19, CGTZ14, MS21, Pha20, PW16, SLWX23, YZZ17, ZN15, Mar94]. **Minimizing** [BM20a, BCU00, CWY11, CCR17, CL96b, DW22, DIL16, FGG04, FHN09, GHR14, GN17, GN19, GN20, Hag01, HNP00, HPW23, Kuč08a, LRO05, LMMZ21, LSS14, Mon23, ND09, Phu10, QZ00, XY97, XY00, YZ13, And96a, SZ92]. **Minimum** [AY08, AHLN16, BGV20, Dax09, HG16, JPT13, MBW09, PR98, XFLP21, XLD99, Yil06, Yil08, ZZN18, GIJT96, RV93, War92]. **Minimum-Concave-Cost** [AHLN16]. **minimum-cost** [RV93]. **Minimum-Rank** [XFLP21]. **Minkowski** [LZH14]. **MINLPs** [WA15]. **Minmax** [ACB20]. **MINRES** [LR22]. **MIPs** [DW10]. **MIQP** [FL98]. **Mirror** [BBN14, BTMN01, DL15, DAJJ12, FMP18, LLZ23, NL14, ZCH⁺23, ZMB⁺20]. **Mirror-Descent** [NL14]. **Mirror-Prox** [BBN14]. **Mirror-Stratifiable** [FMP18]. **MISO** [LTAP22]. **Mixed** [AWW09, AD00, BHM18a, BHM18b, BCWP21, Bil02, BW02, BEET12, BCD⁺18a, BG22, BJS07, BDL⁺16, BR21, CF01, CMY15, DLM21, DIS04, DENR20, GMSS17, GNS08, Góm21, GAD20, GNL11, GACD14, HPU19, HAN11, Hyn23, Jan06, Kan14, KPZ19, KM19, LPS05, MDV12, NS21, NRS21, RSvdVH16, ST03, SKR16, Trö05, Ulb01, XHL14, Zas13, Boy95, Eck94]. **Mixed-Integer** [AWW09, BCWP21, BCD⁺18a, BG22, BDL⁺16, DLM21, GMSS17, GNS08, Góm21, GNL11, HPU19, HAN11, KPZ19, MDV12, NS21, NRS21, RSvdVH16, ST03, KM19, Boy95]. **Mixing** [BDPX09, DG09, DW11, RTM23]. **Mixtures** [BH14a]. **Mizuno** [Bos93, GT97a, GT97b, KT14]. **Mode** [Ani05a, Ani05b, SZ98]. **Model** [And00, AKK14, BAC11, DD19, HR22, LPS05, Mar17, Ni05, ST10, TQP22, Yos07, YM14, dKV16]. **Model-Based** [DD19, HR22, ST10]. **Modeling** [BLS21, FFG99, VJFC18, ZM06]. **Models** [BSV14, BV10, BGM⁺16, BCD20, CSW15, DR14, FWKS15, FGM12, FHKM06, HHP18, HP18, KKT15, MTB23, OR02, PP12, PP16, RR15, RvdVH15, RSvdVH16, YZ13, ZYP21, vAF18]. **Moderate** [GY23]. **Modern** [CPS18]. **Modes** [LV07]. **Modified** [Gou99, MS11c, SE99, SXMW13, Wri99, WX22, Pow95]. **Modifying** [Wri02]. **Modulation** [RADK05]. **Modulus** [CKL⁺14, GVJ06]. **Molecular** [ANRV04, AT03, Wu96]. **molecule** [Hen95]. **Moment** [CCH05, LM18, LMX17, MN09, MP14a, MP14b, NJS21, STKI17, WML21b, ZXZ16, BH95, WML21a]. **Moment-Based** [NJS21]. **Moment-SOS** [WML21b, WML21a]. **Moments** [BNT04, Las01]. **Momentum** [DJ21, Tse98]. **Momentum-Based** [DJ21]. **Monge** [HP07]. **Monomial** [BMW10]. **Monotone** [AZ05, ACS14, Alv04, AMS16, AL20, AG14, BMW16, BBW07, BWY10, BW07, BH14a, BCH14, BAC11, BAD18, BAR21, BL22, CC99, Com14, DST23, GY20, HYF05, Hyn23, KS12, KSH97, Lin08, LB00, Mal15, MT20, McS96, MS12, MSS15, NT06, Nem04, Pen00b, Rob07, Sab11, SSK98, SS00, SZ98, Tse97b, Wan11, YF00, AVS19, MOT95, Man91, McS94]. **Monotonic** [Tuy00, TMHP06, Ris94]. **Monotonicity** [BGW07, IPS03, Lim23, LR22, LMV23, MP97, MTT94, MN16, ZL01, CH94]. **Monotropic** [Gha17]. **Monte**

[SdM00, VV21]. **Monteiro** [Mon98, Sim11, WW20]. **Moore** [HH96a]. **MOP** [TLT⁺18]. **Moreau** [BBW17, BDL18, BHHK00, CHLC19, DDD22, HSW14, LS97a, MZGS08, PAV21, PW16, WDST14]. **Mosco** [ZW12a]. **Most** [SLWX23]. **motions** [GK95b]. **Motivating** [JW14]. **Motivation** [WB05b, PQ93]. **Move** [ARS07]. **Moving** [AST10, BR19a]. **MPPC** [JRS09]. **MPPCs** [RB05]. **MPEC** [YZ10]. **MR** [MZ00, QW01, ZT98, LR21a]. **MTY** [MT04]. **Multi** [ABDL21, HF14, PTJY10, RHW93, ZWHZ23]. **Multi-block** [ZWHZ23]. **Multi-Leader-Disjoint-Followers** [ABDL21]. **Multi-Leader-Follower** [HF14]. **Multi-objective** [RHW93]. **Multi-Task** [PTJY10]. **Multiblock** [DLR17, LY19, LMZ15]. **Multibody** [GAP08]. **Multibranch** [DGR17]. **multicategory** [BM94a]. **Multicommodity** [Cas00, McB98, Vil05, Zen91]. **MultiComposite** [CHP20]. **Multiconjugate** [Lim23]. **Multicoordination** [MZ99]. **Multicriteria** [DD98, DY04]. **multicriterial** [Sta92]. **Multidimensional** [GLT04, HN19, HHP18, MU14, Qi16, TP16, PR93]. **Multidirectional** [ACL99, Tor91]. **multidisciplinary** [CDF⁺94]. **Multifold** [CCP08]. **Multifunctions** [GO16, HJO02, SYZ19, ZN07a, ZN09, ZN14a, ZN21, Den00]. **Multigrid** [CP18, WG10]. **Multilevel** [BGN22, CGRV21a, GKT23, VV21, YWF19, ZX21, ZU11, Zie14]. **Multilinear** [DK18]. **Multiload** [BTKNZ99]. **Multimarginal** [Car22]. **Multiobjective** [AP21, ASZ08, BNL⁺18, Chu18, Chu20, CMVV11, DENR20, Eic09, FDS09, FV16, HY02, LLR16, Luc02, LPV05, MTZ03, MGGS09, NE19, TLT⁺18, TE19, WHY⁺19, ZN14a, GJLVP14, ZÁC17]. **Multiple** [AWW09, BS98, CKP00, CKS15, Don16, FMW96, GV00, GM12b, GST11, HCH12, HL08b, Luo97, MWDS18, SFM14, SKL09b, TZS02, YLS⁺15]. **Multiple-Cut** [TZS02]. **Multiple-Load** [SKL09b]. **Multiple-Splitting** [GM12b]. **Multiplier** [AT00, BTZ97, DT98, GJ99, JLD03, KKS19, Luc02, NWYZ21, WJ00, Ye04, ZL20, ZN07a, Dun93]. **Multiplier-Penalty** [KKS19]. **Multipliers** [Bol14, FIS20, HLR16, JS20, MS13, MS19, Pen19, Sha97, ST14, STY15, Trö05, Tre95]. **Multipoint** [HL23a]. **Multirate** [ZHE23a]. **Multiscale** [Far20, GST08, MB14]. **Multisearch** [CMVV11]. **Multispectral** [RSMB19]. **Multistage** [AP18, GS21, GR12, Gui16, GMS21, HRS06, Küc08b, LZ03, MP16, MP19, Pfl10, PP12, PS21b, RBDM22, SÖ17, Sch98, SZ14, SD20b]. **Multistart** [Har98]. **multitarget** [PR93]. **Multiuser** [KNS11]. **Multivalued** [AGH10]. **Multivariable** [CH09]. **Multivariate** [DW15b, HP07, KdK23, LSZ04, LZ10, MN09, dKLS15]. **Mumford** [Wan95]. **Nanoporous** [BGG⁺12]. **Narrowing** [YWAS17]. **Nash** [AVS21, BK21b, BHR19, CCM20, CK99, DJS13, DFKS11, Ete20, FK10, GXZ21, HM15, HSK15, HF14, KS12, KS16a, KKS19, LFKCT23, LS22, NTZ23, OLR21, RS11, Sag16]. **Natural** [HZC22]. **Nature** [PW16]. **Navier** [HH06]. **NCP** [CC99]. **NCPs** [CL14]. **nCUBE** [GR94]. **Near** [AP22, GV15, PW17, ZB18]. **Near-Optimal** [AP22, ZB18]. **Near-Separable** [GV15]. **Nearest** [LdQ11]. **Necessarily** [BM16a, BD17]. **Necessary** [AZ09, Aus10, BT04, CLMP10b, CT02, CLPA21, DZ14, Gfr07, HN09, MM11, Sta92, WX20a, XY10, YZZ97, Ye00, YZ10, Zhu02, NT02, War92]. **Negative** [LR22]. **Neighborhood** [Gon99, LT10b, LP06b, Pot14]. **Neighborhoods** [AZ05, HY96, Zha98b]. **Nelder** [Kel99, LRWW98, LPW12, McK98]. **Nested** [BH96, GRW20, Pfl10, VJM16,

YWF19, ZX21]. **Nesterov** [AP16, AF22, ADR19, NARS14, TTT98].
Network [ALSV18, AKT17, Bar96, BPT97, BRU97, CJSY07, Cas00, DRT17, EB20, Ete22, FG04b, GHK17, HPU19, lid12, KKW09, KW10, LM16, MPSU19, MBW09, NMU18, PW05, Pul97, Rag13, RCGR18, RSE18, SCRS00, SK98, Tse07, WZYB08, XLD99, ZZ96, ZSY10, Sar95]. **Networked** [lid13, JRJ10]. **Networks** [AH19, BPS06, CHP20, Ete20, FHKM06, GKT23, LdF08, LDS22, LSS22, LXB19, Wen97, Bon97, GMS92, RV93]. **Neumann** [PRS16]. **Neural** [CHP20, GKT23, LDS22, LSS22]. **Newton** [Ger11, WST10, ACN15, AD10, And96a, ABO22, AL20, BS15, BJKJ17, BK21a, BFO19, Bel94, BBN19, BU22, BS94, BK10, BLN92, BHNS16, CD19, CGT10a, CNQ97, CNY14, CH15, CL96b, CRRW21, DIS04, DGT20, Dix91, DQY02, EW94, EM91, FJS98, FLP02, FGO14, FS17, FHIS16, Fle91, FDS09, FM97, Ger08, GO21, Gil97, GL01, GW93, GN17, GN19, GLN07, GOP19, HMW21, HN05, HL23b, HLP23, HIK03, HH06, HGA15, IdW16, IK00, IS04, IS08, KN05, KFF09, KV17, Kau99, KSX08, LN93, Lau00, LSS14, LS93, LN07, LdQ11, LST18a, LST20, LM99, LLST19, LMH19, LV08, LWZ15, LR21a, Lu17, LRR98, MSQ98, MU14, MXC⁺19, Mis23, MER18, MP99, MS12, MN00, MS21, NN91a, NLQT06, PMR19, PCA19, PW17, Qi99, QZ00, QGD18, RN21, Roo06, Roo15]. **Newton** [Sch08, SXBN22, SS00, Sta04, SH97, SK98, SW99, SSQ04, TZSW96, Ulb03, WN16, WMGL17, WHY⁺19, Wri95, WPY23, XS99, YNS20, YLG22, ZA14, ZZST20, ZST10, ZC10, ZPXQ21, ZNB⁺93, dPRT01]. **Newton-Based** [PMR19]. **Newton-CG** [WST10, HL23b, HLP23, ZST10, CRRW21]. **Newton-like** [AL20, BJKJ17]. **Newton-MR** [LR21a]. **Newton-Type** [IS04, KN05, LSS14, NLQT06, QGD18, SS00, HH06]. **Newtonian** [FIS10, IK14]. **Nice** [LRS22, Ros14, RT19]. **Nikaido** [HSK15]. **NLP** [Fle12, LXL11]. **No** [CW18, LYP23, EH20, MZ00, QW01, ZT98]. **No-Gap** [CW18]. **Noise** [BCS21, JBS⁺23, KLL22b, OBN23, SXBN22]. **Noise-Tolerant** [SXBN22]. **Noisy** [AF01, BBN19, CCF⁺20, DKVW17, MS18, Nol98, TY11]. **Non** [BC14, CLP16, CTW19, GMM17, HKMS20, LTP23, She14, TDZ20, ZC20, ZCT10, GK99, NT02, War96, ZL03]. **Non-Euclidean** [GMM17, LTP23]. **non-Gaussian** [GK99]. **Non-Lipschitz** [CLP16, ZC20, NT02]. **Non-Lipschitzian** [BC14, CTW19, ZCT10, War96]. **Non-stationary** [TDZ20]. **Non-Zenoness** [She14]. **Nonasymptotic** [ST13]. **Noncoercive** [FB00]. **Noncommuting** [CKP12, PNA10]. **Noncompact** [GWZ15, VS10, ZT92]. **Nonconvex** [ATP21, ABCFR20, ANP08, AFS14, ACB20, Aus15, BB21, BE06, BT21, BGMT19, BGY⁺23, BM14, BLP23, BCN19, BB23, Bou16, BDPP14, BL09, BLO05, CD19, CGT10a, CGT11, CGT12, CGT20, CCF⁺20, CLL23, CMV19, CHP20, CO12b, CRRW21, CW23, DKL21, DG19, Don16, EQR22, FIO8, FK00, FB03, FBM13, FBM15, FBO21, FG98, FGG04, GL14b, GNRPT16, Har09, HS10, HS23, HL23b, HLP23, HL14, HLR16, HZZS22, HAG18, lid12, JL18, JJ15, KM09, Kas10, KLW18, Kiw07a, Kiw10, KT00, KMM19, KM21b, KRT07, LY19, LMW16, LMZ21a, LTAP22, LF01, LN02, LP15b, LZSV20, LM21a, LXB19, MXC⁺19, uDR15, MN13, NE19, NT19, NR20, OP19, OLR21, PS11, PT18, PMR19, RW18, SBT16, SLWX23, SLM05, TSP18, TP20, THDL22, Tse03, WMGL17, Wan17, WCP17, WLZY07, XSLZ11, XKK22]. **Nonconvex** [XY15, ZL20, ZC20, ZL22a, ZN10, Kiw96, Tha94, Tre95, CDHS18, HFD16]. **Nonconvex-Concave** [BB23, KM21b, OLR21]. **Noncooperative**

[vdLTY06]. **Nondegeneracy** [BS98, CS08b]. **Nondegenerate** [Vui14]. **Nonderivative** [Kiw10]. **Nondifferentiable** [GMS21, MSQ98, NB01, Ye04, Kiw96]. **Nondiscrete** [MP19]. **Nonemptiness** [MZH20]. **Nonempty** [BP07]. **Nonexpansive** [Ceg15, CRZ18, CG17, IY09, KL97, KT08, LMV23, NT06, SY13, Tse92]. **Nonexpansive-Type** [KT08]. **Nonglobal** [For05, WX20a]. **Nonindependent** [dM08]. **Noninterior** [CX99, CH93a]. **Nonisolated** [ATP21]. **Nonlinear** [AFS01, Ani00, Ani02, Ani05b, AD04, AD09, Aus15, BE14, BCRZ21, BH03, BPC11, BGM⁺16, Bla21, BKT99b, BHN99, BCN10, BCT19, CGT11, CGT14, CH97, CX99, CWH06, CRY99, CHN18, CY10, CV17b, CVV99, CR04, CJRW14, CWZ18, DHL⁺99, DY99, DK13, DD98, DEAW99, DSD12, FS97, FJS98, FP97, FGL⁺02, FG98, FS05, FSF12, Fus14, GLM98, Gfr07, GM15, GKR20, Gis21, GKV03, GOST01, GLT04, GLR14, GLN07, GST08, GNL11, GSW97, Gün14, HH96a, HHP18, HP18, HZ06b, HY02, JBS⁺23, JR00, JZZ20, KP99, KFF09, Kas10, KKT15, KK05, Kol05, LPT07, LRZ21, Las02, LM02, LSW06, LZ03, LS04, LY11, LL09, LLS10, LDLS20, Mal07, Mat05, MU20, MS11b, MG98, NA20, NWW09, OOT22, OW06, OS17, Pat98, POLW20, PP18, Pyt98, Rag13, RKG08, RM08, SD00]. **Nonlinear** [SW11, SAZ22, SL14, SS00, SKB18, TWB⁺03, Ulb01, Voi08, WB05a, WB05b, Wat00, WG10, Wri98, Wri01, Wri05, YY03, YT10, YH01, Yos07, ZA14, ZCD00, ZC10, ZLTD22, vAH14, AW93, BKT99a, BS94, Bur92, CL96a, CL92, DvTY91, Dan93, DMZ94, Dun93, Hei93, Hus94, Iof94, IK92, KSW94, LP93, MPW95, Sar95, YY95, YG91, ZC91]. **Nonlinearly** [LJ02, Sta99, GR94]. **NonLipschitz** [CNY14]. **Nonmonotone** [AFFG14, BMR00, GLR15, LN09, LZ19, QP23, TSP18, Ulb01, YPC18, ZH04]. **nonmonotonic** [EA95]. **Nonnegative** [CHLZ17, CST19, Erg19, GV15, Las05, Las06b, LSZ04, RV06, Vav10, ZCTW12]. **Nonnegativity** [Las11]. **Nonpolyhedral** [PR95]. **Nonseparable** [CN23, FB19]. **Nonsingular** [BM07]. **Nonsingularity** [BPC11, CS08b]. **Nonsmooth** [ABO22, AV20, AFS14, ACL99, BRA⁺20, BIM23, BR23b, Bet19, BW02, BDL07, BLP23, BLPP16, BCN19, BDL23, BLO05, BK10, CD00, CNQ97, CQT03, CMSZ20, Chr20, CDM20, CV17b, CO12b, DL15, DSS09, DG19, DDD22, DZ14, Dol20, EW09, FLLR14, FH14, FGG04, FKP10, FQ96, GAP08, Ger08, Ger11, Gfr13, GL18, Hab98, HL23a, HSS20, HU17, HU19, HNP00, JL03, JY04, JBK⁺18, JS11, Kan14, KN05, KT18, Kiw07a, Kiw08, Kiw10, LMZ21a, LN09, LLC22, LLR16, LLRV19, LZ19, MX06, MXC⁺19, MS21, NARS14, Nes05, NT19, PQ93, PT18, PR96, PC03, RS11, RHL14, SS05, Sen07, Sol07, SH97, SSQ04, TDFC18, WJ00, WP23, WCP17, XYZ15, ZOB20, ZLTD22, Jey91, Pan94, Qi95, SZ92, Sta92, GJV16]. **Nonsmoothness** [Lew02]. **Nonstationary** [Gha23, GS01, McK98]. **Nonstrongly** [FRMP18, YNS20]. **Nonsymmetric** [BPS99, DZ07, O'L95, SW95]. **Norm** [Dax09, DV14, DV16, Gar21, Lin08, MMBS14, PTJY10, SM18, TQP22, WLS23, WDST14, WPY23, XLxY21, XFLP21, ZL02, AB95, Dax92, Hei93, JLW16]. **Normal** [AH05, BSW23, CH17, DD98, GJ17, LN14b, LL23, Lu14, MOT04, QWY04, ZL01, ZW12a, ZN14b]. **Normal-Boundary** [DD98]. **Normality** [BYZ19, AFSS19]. **Normed** [BU22, FBH22, LN05b, LNP07, LMP⁺18, LNYZ21, MM21, NZ01]. **Norms** [AdKH19, GG18b, HHJL23, QZ00, Sch12, XY97, XY00, And96a]. **Note** [AW00, Bie16, LM05, MZH20, WD05, SM93]. **Notion** [Chu06]. **Notions** [HL14]. **Novel** [JL19]. **NP** [PW19, RK19]. **NP-Hard** [PW19, RK19]. **NT** [JH14]. **Nuclear**

[DV14]. **Null** [BM98b]. **Number** [AB12, AILT14, BV21, CWY11, CCH05, CCP08, GL08a, GL08b, LV22, OHF12, PVZ07a, See22, SS22, YZ13, Zol03, dP02]. **Numbers** [AL14, MY09, Ren96, dKP12].

Numerical

[AHO98, AFGG11, BV10, FL98, GLR15, Har14, HKK11, INT17, KN02, KN04, LP93, RFB⁺11, ZG03, ZNB⁺93, NN91a, SZ92].

Objective [ASZ08, GJT23, GKT23, HL08b, KT14, LSW06, RP12, TM15, WP23, ZT98, AW94, MTT94, RHW93, ZT96].

Objective-Function-Free

[GJT23, GKT23, KT14]. **Objectives** [CC19, LPW23, ZW18, CLMS93].

Observable [NJS21]. **Observations**

[OS17, PP16, TY11]. **Obstacle**

[HKK11, Wac14]. **Obstacles** [Xu19].

Obtaining [DMS22]. **Occupancy** [BLS21].

ODE [HPU19]. **Off** [WLZY07]. **One**

[BW02, BR08, BKS96, DV14, JRW94, JS97, RW16, Wat00, WBME14, XLD99, Bos93, KBS93, WA15]. **One-Parametric**

[JS97, JRW94]. **One-Sided** [RW16]. **Online**

[GH16, MMN⁺22, SY13]. **onto**

[BBW18, BSW23, HZ16, Rut17]. **Openness**

[DS12, LP22]. **Operating** [GLM98].

Operations [Ans99, ALSV18, BP15].

Operator

[AB18, AH05, BGW07, GL08b, KLL22a, LMV23, O'D21, RSMB19, RTBG20, SU14, Ulb03, WLN23, XC21, MOT95]. **Operators**

[Alv04, AL20, AVS19, BMW16, BBW07, BZ04, BW07, BH14a, BCH14, BU22, Ceg15, CRZ18, DP19, DST23, DSST20, Nem04, Wan11, CH94]. **OPT** [VV21]. **Optical**

[ZM06]. **Optim** [MZ00, QW01, ZT98].

Optima [EH20, MM11]. **Optimal**

[ADE⁺18, AP22, AO06, ADR19, BK21a, BDM16, BM16b, BM18a, BHHK00, BP05, Bet19, BBV02, BPS06, Cal07, Car23, CT12, CD92, CLO14, Chr20, CF99, DK13, DG23a, DYC⁺21, DK10, DFR18, Ete20, FS23, Fie00,

Ger08, Ger11, GL12, GL14a, GCPT18, GK99, GKR14, HTT⁺15, HHP18, HP18, HBM21, Her09, HMW13, HV05, HSW14, IK00, IT18, JNN21, JKZ98, JS20, KS00, KLL22a, KLL22b, KU15, KR02, KGM23, LZ23a, LM18, Lau00, LPR00, LM21b, Lim11, Mal07, MRT15, MCL10, MN14, MOS14, OR16, PZ03, RS97, RT06, RFB⁺11, RTBG20, Sch09, SW11, SU14, SKC12, SdM00, Sta99, TSAKN23, TM15, TW14, VZQD17, Wac14, WZZ22, ZML21, Zha20, ZB18, dGJ18, BTB93, Bon97, Dun93, Fle95, GHRT98, MS94b, Ral96, Wri91].

Optimal-Storage [DYC⁺21]. **Optimality**

[AAS17, APX17, AXY23, AMS10, AHSS19, AFSS19, AD19, Aus10, BT04, BT00a, BE14, BGY⁺23, BCS99, BH96, BHR19, CLMP10b, CT02, CdlRT08, CHW12, CNY14, Che15, CM21, Chu20, CLPA21, DZ14, DKM18, DMM06, Dol20, EW09, FS12, GW21, Gfr13, Gfr14, GG18b, GYZ14, GJN06, HSS20, HS11, JLD03, LL23, LP06a, MY10, MOR15, Ni05, PY97, Pen17, RT06, SN07, SPM18, SKR16, VJFC18, WW20, XY10, YZZ97, Ye99, Ye00, YZ10, YZ16, ZN11, Di96, GIJT96, JSC95, NT02, Sta92]. **Optimistic**

[MOP20]. **Optimization**

[ABT00, AK08, ANT16, ABCdC23, AFH⁺13, ASNP16, ATP21, ABCFR20, AKS00, AABL21, AD10, AMHL05, AT03, And00, AF01, AMS10, AB08, AP21, AKR23, ANP08, ATU23, ABO22, AKK14, AO18, ACB20, AFGG11, ASSS23, AO06, AD06, ACD08, ASZ08, ABK22, ADR22, AT06, ACL99, AZ08, BER04, BQX15, BJKJ17, BGN22, BRA⁺20, BB21, BBW05, BO17, BT00a, BE06, BE14, BPS15, BR23b, BGMT19, BTMN01, BGY⁺23, BYZ00, BNL⁺18, BBN19, BCRZ21, BHKO02, BHK⁺09, BFS16, BY11, BNT04, BP05, BdHP21, BCWP21, BC14, BG08, BM14, BM18b, BLG13, BGM⁺16, BM17, BM18c, Bla21, Bla23, BKT99b, BGG⁺12, BB19, BBN18, Bom15, BMSS19, BG22, BLPP16, BP97,

BS98, BIS05, BKMW20, BHP23, BDL23, Bou97, BR08, BFMS14, BM20b, BL22, BR21, BLO05, BCW14, BCWW20, BCN08].

Optimization

[BCN10, BCNN11, BHNS16, CKP12, CMYZ22, CGRV21a, CP18, CLPT06, CKLP07, CGC15, CDHS18, CCL09, CGT10a, CGT14, CGT20, CT02, CM20, CM22, CM17, CS16, CM11, CHLZ12, CNY14, CLP16, CJ18, CTW19, CCF⁺20, CMSZ20, CLL23, CR23, CSY23, CRY99, CCN⁺18, CBFG23, CSW12, CN23, Chr20, CDM20, Chu16, Chu21b, Chu20, CV17b, CGST96a, CVV99, CHP⁺09, CP01a, CH13, CPRZ20, CR21, Cru14, CDZ17, CHP20, CNW10, CO12b, CJRW14, CRS18, CWZ18, CRRW21, CW23, CMVV11, DL15, DHP16, Dan21, DD98, DP22, DDD22, DKS22, DENR20, DZ14, DKM18, DV97, DEAM97, DR03, DR07, DHR07, DR14, DW15b, DL22, DGN12, DW22, DLV10, DGL10, DSD12, DNSD13, DMVV17, DN20, DN22, DIL16, DLR17, DBW12, DR18, DPS17, EH20, Eic09, EQR22, EA99, EL09, EAV10, EN14, FWKS15].

Optimization

[FLP02, FLY11, FI08, FLLR14, FRMP18, FV07, FS96, FIS10, FGO14, FLP19, FLS03, FH14, Fle14, FDS09, FV16, FB03, FBM13, FBO21, FHPS22, FV99, Fre03, FS05, FMP14, FHKM06, FPT22, Fuk98, GB22, GLCxY18, GSAS21, GC23, GH16, GSU21, GW21, GLRW21, GMSS17, GHKL17, Gfr07, GL12, GL14a, GRW20, GL01, GMS02, GL03, GKR20, GSG12, GLT03, GLdS05, GM12b, Góm21, GHZ99, GKR14, GHHL05, GDG22, GJ99, Gou99, GST05, GLR14, GH15, GN23, GST08, GJT23, GKT23, GE14, GW19, GKPV01, Gün14, GJN06, GHNS19, Hab98, HPU19, HZ06a, HP09, HdR02, HMJ⁺23, HL23a, HS21, HPD14, HS10, HKP18, Har98, HSS17, HXH22, HLNZ08, HP18, HL23b, HLP23, HR14a, HSS20, HBM21, HK10, dM08, HZZS22, HWWY23, HU17, HU19, HM02]. **Optimization** [HR22, HFD16,

HLV16, HS17, HCH20, HXLT23, HY15, HNP00, HY02, HY06, HGA15, HAG18, IY09, Iid12, Iid13, IH14, Iof09, IS02a, IS04, ISU12, JHR23, JBS⁺23, JFX17, JAL15, JY04, JLL09, JLLP16, JL18, JLW16, JS16, JLZ20, JL05, JRJ10, JS97, JM18, JBAS10, Kas10, Kau99, KY21, KLW18, KT18, KQ19, KMP23, KKW05, KKT20, KNP98, Kiw04, Kiw07a, Kiw08, Kiw10, KPV18, KSdM01, Kol05, KLT07, KNS11, KS16b, Kuč08a, KJ17, KS05b, KBGY22, KGM23, LNP98, LPW23, LZ16, LZ18, LY19, LRZ21, LOZ23, LZ23a, LMW16, Las01, Las06a, Las09, Las10, LP10, Las11, Las16, LM19, Las22, LP15a, LJ20, Lem98, LS13, LRP16, Lev00, LT02, LF01, LN07, LNP08, LFLL09, LT10b, LP15b, LST16, LMP⁺18, LL20, LCD⁺21, LBT22, LL23, LM21a, LM99, LNS18, LX23, LNQY10, LXB19]. **Optimization**

[LU97, LY11, LMX17, LLC22, LLS10, LLR16, LLRV19, Lu09, LFN18, LM23, LSdZ18, LV19, LRR98, LS02, Lue08, LA08, LSW20, LSTZ07, LSL08, LZ10, MMN⁺22, MSFL17, MU18, MWDS18, MP19, Mai15, MPP⁺17, MC05, MS11a, Mar05, MRS16, Mar17, MP14a, MP14b, MLC22, Men17, MSQ98, MM05, MU20, MU14, MXC⁺19, MMBS14, MS20, MM21, uDR15, MS11c, MS14, MTZ03, MO07b, MR12, MRS14, MN14, MS21, MW09, MA00, MS06a, MARS10, MTB23, MNR⁺22, MGGS09, MS02, MKU21, NYF11, NB01, NOS17, Nes12, NT16, NS17, ND10, NS21, NLZ10, NR09, NW12, Nie14, NWYZ21, NE19, NS18, NRS21, Nol98, NMU18, NR20, OOT22, OP19, OF03, OBN23, PS10a, PARN22, PT18, Pap16, PY19, PMR19, PRT02, PTZ05, Pen19, PP18, PFA17, Per23, Pf10].

Optimization

[PP12, PP16, PS21b, PW17, PMDL10, PNA10, PC03, QQ00, Qi16, QP23, QGD18, Rag13, RBDM22, RNV09, RHL14, RC22, Ren16, RW12, Roo06, Roo15, RW18, RW17, Roy20, RR08, RSKW19, hRK14, SS17, ST22,

SS05, SBD⁺11, STKI17, SI13, ST10, SO21, SSW16, SOT09, Sch05, Sch06, SFP11, SK22, SDGM99, SSSZ10, Sha97, SZL23, SHP18, SZY16, SM18, SLWY15, SXBN22, dCST19, Slo22, SL14, SLWX23, SVD12, SVD14, SH15, SGK21, SMG14, SKL09a, SKL09b, SSQ04, SLM05, SAV14, SSD22, Sva02, TLT⁺18, TA98, THG17, TW14, TP20, TE19, TSR22, TPF22, TDFC18, Tse03, Tuy00, TMHP06, VV21, VVM⁺09, Van14, VD06, VIT22, Vog08, VS08, VS10, WUR⁺23, WKKM06, WG19, WST10, WMGL17, Wan17, WHY⁺19, WX20b, WG10, WTKR13, Win08, Wri12, Wu96, WZZ18, WPY23, XA18a].

Optimization

[XKK22, XY15, XYZ15, XA18b, YY03, YT10, YmZS15, YH01, YLQ03, YST14, YFHS16, YWF19, Ye99, Ye00, Ye04, Yin99, YLZ02, YKI04, YNS20, YPL21, YCST22, YM14, Zas00, Zas05, Zas13, ZZ96, ZH04, ZH06, ZXZ16, ZC20, ZAL21, ZX21, ZL22b, ZL22a, ZHE23a, Zha20, ZY07, ZN11, ZN14a, Zhe20, Zhe23c, Zhe23b, ZCTW12, ZPXQ21, Zhu02, ZU11, Zie14, Zol03, ZÁC17, d'A08, dPRT01, dKL11, dKLS15, dKHL17, vdBF11, Ali95, And96b, AM94, BNS95, BKT99a, BD93, BL94, BTZ92, CGST93, CDF⁺94, DEG⁺91, EA95, GN92, Gil97, GK95a, GR94, GW93, Hen95, Iof94, JRW94, Kiw96, LS91, NS91, NN91a, NT02, Onn94, Out94, Ove92, PZ94, PY93, RHW93, RS94, RD95, Sar95, Sch92, SC91, SM91, Ser95, SF95, Sta92, Wri92, Zha94a].

Optimization-Based

[SVD14]. **Optimize** [BBG⁺20]. **Optimized** [KF18b, QCLP19, WX22]. **Optimizing** [BLS21, HL06, LMZ21a, MY09, PCA19].

Optimum [PZ98, PZ00]. **Option** [BCM03].

Oracle [CGT12, WK19, Onn94]. **Oracles**

[Chu21a, vAS14]. **Orbits** [CG17]. **Order** [Abr05, AA06, AXY23, ASS18, Aus10, Aus15, AI11, AI12, BT04, BDS10, BBW17, BT12, BV18a, BF08, BGM19, BGY⁺23, BGM⁺16, BSTV18, BCS99, BCD18b, BL22, BA13, BCT19, CT06, CMYZ22, CGRV21a, CGT12,

CGT20, CT02, CdiRT08, CT12, CM20, CM22, CB14, CYZZ19, CW18, CMV19, CS15, CSV09, CRRW21, DSK20, DHR07, DO19b, DN22, DFR18, EI06, FS12, FSF12, FLT01, GLC_xY18, Gfr07, Gfr11, Gfr13, GM19, GVA11, GL14b, GL15, GNS08, GN20, GN23, HYF05, HW10, HS06, HM15, HL23b, HLP23, HMN10, Her09, HS11, HNKK17, HN04, HZ22, JL18, KP22, KFF09, KT18, KM21a, LST21, Lin08, LJ16, LFN18, LM23, LZ23b, MMN⁺22, MP18, MLC22, MS03, MS14, MO01, MR12, MOS14, MOR15, MS06b, Nes21, NR20, OOR17, OLR21, OR11, PC08].

Order [PRT02, Pen17, PQS01, RT06, RW18, RR08, SS17, SLWY15, SL21, SKR16, SJM21, SXMW13, THG17, TW14, TDZ20, Tse07, Wal08, WB16, WY03, Xu17, Xu22, YZ16, YM14, ZY14, ZL22b, ZWHZ23, BRB19, CLMS93, CJ18, Dun93, Mar17]. **Ordered** [BP07, BTMN01]. **ordering** [AEGS93].

Orderings [Ort91]. **Orders** [BBW17].

Orthogonal

[AADD09, Che01, Lin22, MW06, WZZ22].

Orthogonality [GLC_xY18, MP97].

OrthoMADS [AADD09]. **Orthonormal** [CP08].

Other [BMZ01, DGR17, ZT98, ZT96].

Out-Forest [Rot09]. **Outcomes** [QCLP19]. **Outer** [CNQ97, GHKL17, GL10, HP94, LW08].

Outer-facial [HP94]. **Outlier**

[Góm21, RSKW19]. **Output** [RS97].

Over-Relaxations [AD15]. **Overcomplete**

[AAJN16]. **Overlapping** [INT15]. **Overton** [KSS99, LM05].

Pack [AKT17]. Packing

[BDDM19, DFO20, DdLM21, EMN22, EL08, EL10, EL14, IPS11, Jan06, MC05, MS02].

Page [dKP12]. **Pairs** [GU22, Luk08].

Parabolic [BCS99, HR14b, KS99].

Paradigm [Pot12]. **Parallel**

[ACP11a, ADL08, BH14a, CCT21, Eck94, Ent96, FR15, FM91, FM94a, FH14, Fuk98, GPR02, Gar93, GMR91, HM02, JYZ94,

JSV91, KT04, Kol05, NC16, NS21, Sol98, SAW99, YN17, AM94, BM94a, DT91, Dix91, Lau94, MMZ95, NS91, Pan94, Ral96, ZC91]. **Parallel-Sum** [BH14a]. **Parallelism** [CCT21, LW15]. **parallelization** [NN91b]. **Parameter** [BBTT12, BH03, BCWW20, HCH12, OS17, QZ08, RTBG20, SNTI16, ZZN18, EA95, IK92]. **Parameterization** [DR01]. **Parameterized** [BS98, Lev00, QZ08, LCPS20]. **Parameters** [AO06, LP15a, MCL10, SFP11, HSS93]. **Parametric** [DSD12, GM17, GM19, GLY12, GLYZ14, HHP18, HP18, JS97, KJ17, Las10, MS11b, MN16, QW20, YY23, YM14, JRW94, LP93, MS94b]. **Pareto** [BKR17, DW15a, DD98, DKVW17, EL09, HHI⁺20, Lov11, MGGS09]. **Parsimony** [Las16]. **Part** [BLMH06, YmZS15]. **Partial** [BT94a, Bur03, GW93, HV05, KYYZ22, LZ13, LLT22, LMT18, QW20, WK19]. **Partial-update** [GW93]. **Partially** [BL93, CTW19, NJS21, NTA04, SAV14, EM91, GW93, Tse91, YG91]. **Partially-finite** [BL93]. **Particular** [Aus15]. **Particularly** [LRS22]. **Partition** [HOR99, SL15, TW14, GHRT98]. **Partition-Based** [SL15]. **Partitioned** [Wri91]. **Partitioning** [GSZ14, PR07b]. **Partitions** [BH96, SK06]. **Partly** [MS03]. **Passive** [ALSV18]. **Path** [AZ05, AKT17, BK10, DNSD13, Fay96, Gon99, HdR02, HK06, HK09, HSW14, HSK15, HY96, KJ17, LT10b, Lin08, LNS18, LP06b, LMO06, LSZ98, Mon97, MBW09, Pot14, Sim11, TDKC14, Tse97b, ZX99, Zha98b, ZL02, AB95, Ans96, Gon91b, Gon91a, NN91b, SG94, Zha96, dRV92]. **Path-Following** [DNSD13, Fay96, HK09, HSW14, HSK15, HY96, KJ17, LT10b, Lin08, LMO06, Mon97, Sim11, TDKC14, Tse97b, ZL02, AZ05, HK06, Gon91b, Gon91a, NN91b, SG94, Zha96, dRV92]. **Pathological** [DD20]. **Paths** [DW11, LSS22, LM04, QLSZ18, Ber91].

Pattern [Abr05, ANRV04, AD00, AD03, AD04, CV07, DLT03, KT04, Kol05, LT99, LT00, LT02, PW06, Tor97]. **Payoff** [ABGJ14]. **Payoffs** [DG20]. **Payoffs-Beliefs** [DG20]. **PCA** [AP23]. **PDE** [Bet19, Bla21, Bla23, CM20, CM22, CR23, CV17b, GSU21, HCH12, HK10, KS16b, SSW16, ZU11, Zie14]. **PDE-Constrained** [CR23, CV17b, GSU21, HK10, KS16b, ZU11, Zie14]. **PDEs** [VV21, Voi08]. **Peaceman** [HLWY14]. **Peeling** [WLZY07]. **Penalization** [ACP11b, HY02, RPK03, RGY99, SXMW13, YZZ97, BL95]. **Penalties** [CKL97, KK02, SBFA17]. **Penalty** [ACP11a, Aus99, Aus15, AI11, BC09, BH18, BTZ97, BCWW15, BCWW20, Cha02, CLP16, CC02, FK10, FSF12, GMSS17, GKR20, GYZ14, HN03, KS10, KKS19, KMM19, LY11, LMZ21b, LL09, LLS10, LZ14, MY10, MMBS14, SS05, TN21, XLxY21, YY03, Zas05, Zas13, ZA14, EA95, Li96, Luc92, PZ94]. **Penalty-Barrier** [GKR20]. **Penalty-Gradient** [BC09]. **Penalty/Barrier** [BTZ97]. **Pennisi** [BCT19]. **Penrose** [HH96a]. **Perceptron** [SP12]. **perfect** [Ris94]. **Performance** [CR23, DGT20, DMM06, Lin22, LYS17, RTBG20, THG17, Ans91, Dix91]. **Periodical** [SD20b]. **Permutation** [JLW16]. **Perspective** [ABD⁺18, AF22, CHP⁺09, DJ21, Har09, LXB19, ZHE23a].

Perturbation [CX08, LN02, NT08, ZN05, ZW12b, ZN21]. **Perturbations** [BGJ12, CKLP07, CSW12, Don16, Hol04, Peñ00a, Phu10, SDR20, ZZN18, GHRT98, SW95]. **Perturbed** [AL21, DNSD13, LN18, MPP⁺17, OOR17, OR11, TZSW96]. **Pessimistic** [LSS19, WTKR13]. **Phase** [Bou16, LYS17, RSMB19, ZB18, dSTVB18, Fre95, JSC95]. **piece** [Gur94]. **Piecewise** [AFGG11, BGP09, Fus14, Gor22, GW19, HS21, KLW18, LM16, Lov11, She14, SL21, WG19, ZN14a, Li96]. **Piecewise-quadratic**

[AFGG11]. **Pipe** [XLD99, ZZ96]. **Pitchfork** [RM08]. **Pivot** [DKS22, Pan05]. **Pivoting** [MPB02]. **Planar** [MW06]. **Plane** [Ans98, BCDJ21, DSP10, DG09, DKLM22, GLY96, GV00, Kiw97, Luo97, Mit00, MG98, NV99, OG03, SXMW13, TZS02, AEGS93, KN93]. **Planes** [AWW09, BM14, BLST19, FMW96, FGG04, Por20, Boy93, Boy95]. **Planning** [FLS03, RADK05]. **Planted** [CC18]. **Plasticity** [HMW13]. **Player** [HM15]. **Poincaré** [Bla21, SSW16]. **Poincaré-Type** [Bla21, SSW16]. **Point** [AHO98, Alv04, AB08, AGJJ00, AD19, BBN14, BER03, BER04, BNL⁺18, BHHK00, Bia16, BP97, BLT17, BCLN22, BI98, BD10, BHN99, Cab05, CD00, Cas00, CKS15, CM11, CLO14, CMY15, Chu09, CL14, CP15, CC02, CY14, CO12a, DIPR20, EAV10, FFK00, FM03, FS08, FKS02, FT02, FT07, GSU21, GP04, GLdS05, GS98, GG03, GG08, Gon14, GLTP98, GLHZ11, Gor22, GOST01, GMO14, GK96, Gu00, GR10c, GY20, Gün14, HYZ08, HA21, HM15, HM16, HL23b, HLP23, IY09, Iid13, IPS03, IS10, JKZ98, JRS09, KSH97, KSS99, KRZ17, KMM19, KM21b, Kor00, KU15, LM02, LR10, LT10b, LM12, LMH19, LS04, LM05, LY07, McK98, McS96, ML05, MÖ07a, MÖ09, Mia96, Mit00, MOP20, MT03, MOT04, NS98, Nem04, NT98, NT16, Nes21, PLS08, PRT02, Per23]. **Point** [PS97, PS98, Pot08, PS10b, Pot14, RB05, RB18, RO18, Ran06, Roo06, Roo15, SOT09, SP97, SSK98, Sim11, SS97, SZ98, TWB⁺03, Toh00, Tse02, WST10, WLLY16, WLN23, WD23, Wri99, Wri01, YF00, YY03, YT10, YST14, YT22, YT02, YW02, Yos07, Zas10, Zha98a, ZOB20, ZZST20, ZWHZ23, Zha98b, ZL01, dKV16, vdLTY07, Ali95, BF96, CLMS93, DvTY91, Gro95, Gül92, HRVW96, HZ06b, JS95, JY94, KKM93, LMS92, McS94, Meh92, Mit94, MTT94, MKT95, MW96, MS11c, NN91b, Pot96, SM91, SG94, TZSW96, Tod92, Wri92, ZTD92, ZTP93, ZT93, Zha94b, Zhu96, ZL03]. **pointed** [BD02]. **Points** [AA06, AY08, ANRV04, AAZ15, Aus10, BWW12, BH20, BGR20, CSV09, DDD22, EZ10, GLM98, GTdS06, GHHL05, GER23, HLB20, HW07, JBK⁺18, JR10, KL97, KT08, LBP20, NS21, OOR17, OR16, OR11, PMR19, Spa14, SLM05, TY04, Win08, Xu19, YZ13, vdLTY06, BF96, Pan94, Sch92]. **Pointwise** [AMS16, CdIRT08, CBFG23, GMM17, HLZ08, HK10, KS93, RT06, SKR16, Trö05, GIJT96]. **Polar** [FMP19]. **Policies** [Ber17, BPS06]. **Policy** [KLL22b, LLZ23, ZCH⁺23]. **Polyadic** [SVD14]. **Polyak** [HY06]. **Polyhedra** [ACHW21, ABP18, BM02, DGR17, Boy93, GMS92]. **Polyhedral** [BR19a, BY11, CP01b, CST19, DR96, ER05, FGM12, GR12, HL08a, HMN10, dMM10, Man99, MB14, Nga15, Rut17, Sch12, LT93]. **Polyhedrality** [BRS15, DGR17, LMT18]. **Polyhedron** [DLW99, HZ16, DvTY91]. **Polymatroids** [HKP18]. **Polynomial** [AdKH19, BK12, Bie16, BM18b, BR08, BMP22, CKP12, CP18, CHLZ12, Chu16, Chu18, DHP16, DP22, GVA11, GPT10, GE14, HYY16, HOR99, IPRT00, JRT97, JPT13, JLLP16, JL05, JM18, KKW05, KKT20, KdK23, KPV18, LMT09, Las04, Las06a, Las09, Las10, Las11, LZ10, MHL15, Mon98, MT99, NT16, NR09, NW12, Nie14, NWY17, NWYZ21, Pap17, PR07a, PNA10, PS10b, Ran06, STKI17, SOT09, SP97, Slo22, WKKM06, YZ13, ZCTW12, dKL10, dKL11, dKLS15, dKHL17, Bar93, BTN94, BH95, DL91, LL94, PY93, ZT93]. **Polynomial-Time** [Chu16, NT16, SOT09, DL91]. **Polynomially** [PH23]. **Polynomials** [BR23a, BS15, BLS21, Erg19, GM12a, GN11, IdW16, KN20, KS15, Las01, Las05, Las06b, Li10, MEV23, Mar05, Nga15, ND09, QWY04, RV06, Sch05, Sch06, SL21, VS08, VS10, Vui14, Yan09]. **Polytope**

[BM02, DK22, DK18, JK00, PW98, RT05, SD20a, Ris94]. **Polytopes** [BS15, Dah99, DRT17, IdW16, KTT14]. **Pooling** [LDLS20]. **Population** [FV07]. **Porous** [RZ01]. **Portfolio** [MCL10]. **Portfolios** [Cal07]. **Posed** [FI08, JZZ20, MS06a, Zhe20]. **Posedness** [CLPT99, DHP16, HY06, Rev97, ZML21, Ver96]. **Positive** [AKK14, ACB20, BDSS22, Bur03, Chu03, Don14, GN11, JRT97, JBAS10, KS15, Las02, LP15a, Lim11, LW08, Mat05, NZ16, QW00, QW01, Shi17, SH15, iT17, TP16, VS10, ZVP06, BF96, Fle95, MPW95]. **Positivity** [LP10]. **Positivstellensatz** [KN20]. **Possible** [CCT21]. **Possibly** [FB19, MS94b]. **Posteriori** [WPD22]. **postman** [SM93]. **Potential** [BTN94, DW22, MP99, RD95, Tüt03, Fre95, JY94, MKT95, Ye92, Gon91b]. **Potential-Reduction** [Tüt03, MKT95]. **Potentially** [AFFG14, CGT14]. **Powell** [GL18]. **Power** [BV10, CGT19, DKL21, KGM23, Lin22, LYS17, PMDL10, Sau20, Bon97]. **Practical** [Ans98, BKT99b, BHR19, GR10b, LS97a, MGGS09, NS98, XB99, JS95]. **Preassigned** [BBF⁺04]. **Precision** [AABL21, CP01b, DFS03, Gu00, PW06, Wri01]. **Precomposition** [BGW07]. **Preconditioned** [BCLN22, MOT04]. **Preconditioner** [CK99]. **Preconditioners** [ABCFR20, BDdSM15, CN17, EF02, FG04b, GST11]. **Preconditioning** [GV15, MPTD21, MS16, MN00, SU14]. **preconditionings** [Ort91]. **Predicting** [ABT00]. **Predictor** [DIPR20, DSD12, Gon99, JPS99, KT14, KSS99, KJ17, LMT09, LP06b, LM05, MS94a, Mia96, MT04, PTZ05, SPT08, Sim11, CLMS93, DL91, LMS92, Pot96, TZSW96]. **Predictor-Corrector** [DSD12, Gon99, JPS99, KT14, KSS99, LMT09, LM05, Mia96, MT04, PTZ05, SPT08, Sim11, MS94a, CLMS93, DL91, LMS92, Pot96, TZSW96]. **Preference** [HXH22, HS17, WX22]. **Preferences** [BG22]. **Preliminaries** [LS97a]. **Prepackaged** [KS00]. **Preprocessing** [KH05, Kea11]. **Presence** [BT04, FIS20, OBN23, Zas10]. **Preservation** [ANT16]. **Preserve** [BP15]. **Preserving** [BBG⁺20, DQQY02, VZQD17]. **Price** [MCL10, Wan17]. **Prices** [BCM03]. **Pricing** [BPS06, HS23, MRS16]. **Primal** [AZ05, AFC22, AHO98, And00, BER03, BER04, BF08, BH14a, BCH14, CERS18, CYZ22, CLO14, Chu09, CV17b, CMV19, CP01b, CH16, Dav15a, DG23b, FB19, FIS10, FG98, Fre03, Gha23, GKR20, GG03, GLTP98, GOST01, Gre00, Gu00, HA21, HSS17, HHJL23, HIK03, HSW14, JR08, JS00, KR02, LS04, LMO06, LJ16, LSZ98, MP18, ML05, MS00, MS03, MT99, MSS15, NO09, NT98, NS14, PRT02, PS98, Pot08, TWB⁺03, Toh00, TDFC18, TDZ20, Tüt03, Val20, WST10, Wri00, Xu17, Xu20, YY03, YT10, ZWHZ23, ZR93, ZLTD22, dPRT01, GT92, Ius91, Meh92, MTT94, MKT95, Mon98, Wri95, ZTD92, ZT93, Zhu95, Mon97, Zha98a]. **Primal-Dual** [AFC22, AHO98, BER03, BER04, BF08, BH14a, BCH14, CERS18, CLO14, Chu09, CV17b, CMV19, CP01b, CH16, Dav15a, DG23b, FB19, FG98, Fre03, Gha23, GKR20, GG03, GLTP98, GOST01, Gre00, Gu00, HA21, HSS17, HIK03, HSW14, JR08, JS00, KR02, LS04, LMO06, LSZ98, MP18, ML05, MS00, MS03, MT99, NT98, NS14, PRT02, PS98, Pot08, TWB⁺03, Toh00, TDFC18, TDZ20, Tüt03, Val20, Wri00, Xu17, YY03, YT10, ZWHZ23, ZLTD22, dPRT01, AZ05, ZR93, GT92, Meh92, MTT94, MKT95, Mon98, ZTD92, ZT93, Zhu95]. **Principal** [CCN⁺18, DKLM22, EH20, WLS23]. **Principle** [BP07, BCCL22, BCM03, ILR01, LN11b, MTZ03, RSS14, Naz91]. **Principles** [AZ19, GY23, GJ17, GKNRP17]. **Privacy** [BBG⁺20]. **Privacy-Preserving** [BBG⁺20]. **Private** [KBGY22]. **Probabilistic**

[BSV14, BNT04, BdHP21, DSP10, GRVZ15, GE14, HAN11, Hen15, KL10, LA08, WK19, vAH14]. **Probabilistically** [LLS05]. **Probabilities** [BJS07, RS15, ST03]. **Probability** [BP05, BW02, BCM03, HP07, MU18, MS06b, PARN22, PW05, Pic13, Wat00, WBME14, vAPA19]. **Probability-One** [BW02, Wat00, WBME14]. **Problem** [ABT00, AINT17, ABCdC23, AY08, AFS01, Ans00, AKT17, BBT06, BTC08, BNL⁺18, BV10, Bie16, BCCL22, BHT16, BT19, BRU97, BV18b, BBV02, BI98, BMP22, CCFP05, CKP00, Cap02, CCLW14, CBJF97, CY00, CM11, CMY15, CLYZ22, CDL14, CL23, CDF⁺94, EB20, FV07, FdOF07, Fle01, GHK17, GLRS15, GHGHL06, GW18, HLTW14, INT17, IY09, lid12, IT18, Jan06, JRS10, KSH97, KSS99, LSS19, Las01, LdQ11, Lie20, Lim11, LLST19, LM05, LDLS20, MPB02, McB98, MN96, MP14c, MBW09, O'D21, Pan16, PRRL97, PR07a, Pfe08, Qi16, QZ08, Ray97, RK19, RT05, RT06, Rot09, RN98, SBD⁺11, SCRS00, SZY16, Sim11, SS00, Sta04, iT17, TBZ16, TMHP06, Wac14, WX16, WX17, WLZY07, XZ14a, XC21, YF00, Yil08, YWAS17, ZG03, ZY14, AEGS93, Bon97, DvTY91]. **problem** [Gar93, HP94, Hen95, HH96b, JSC95, JSV91, Li93a, LT92, Man91, McS94, MPW95, NN91b, SM93, Wan95, Zha94b, dKPS09a, dKPS09b]. **Problems** [AAS17, ASNP16, AKS00, ANRV04, AMHL05, AM00, AP21, ATU23, AGJJ00, Att96, ACP11b, AT00, AST10, Aus15, AVS19, AVS21, AZ08, BBN14, BD17, BT00a, BBTT12, BP12, BPS15, BT21, BR23b, BTZ97, BTNR02, BDM16, BM18a, BGY⁺23, BNL⁺16, BHKO02, BHK⁺09, BHHK00, Ber97, BPT97, BCWP21, BLRS22, BM18b, Bil02, BW02, BGP09, BKT99b, BGG⁺12, BSTV18, Bom15, BMSS19, BS98, BKMW20, BK21b, BLT17, BCN19, BB23, BDL23, BSR17, BV21, BHR19, BD10, BH15, BK10, BCGH08, CKP12, CP18, CCL09, CGT10a, CGT14, CT02, CdIRT08, CHW12, CT12, CN17, CH97, CX99, CQT03, CX08, CLO14, Che15, CLP16, CJ18, CBF023, Chr20, CDM20, CY10, Chu16, Chu21a, Chu21b, Chu20, CMV19, CPRZ20, CR21, Cru14, CDZ17, CPS18, CNW10, CWZ18, DHP16, DIPR20, DIS04, DD98]. **Problems** [DG19, DP00, DENR20, DGJ09, DKM18, DHR07, DSZ17, DGL10, DMVV17, DN22, Dol20, DdLM21, DR18, ET19, EQR22, EN14, FS97, FK10, FCF07, FLY11, FI08, FRMP18, FK00, FMW96, FFG99, FB00, FG04b, FLT01, GLCxY18, Gar21, GSU21, GP19a, GW21, Ger08, Ger11, Gfr07, GSG12, GLY96, GHHL05, GS07, GLN07, GY20, GMS21, GACD14, GSZ14, GJN06, GKNRP17, HPU19, HHI⁺20, HA21, HS21, HYF05, HW10, HM15, HM16, Her09, HS19, HL14, HK06, HKK11, HSK15, HL17, dM08, HLR16, HZ06b, HAG18, HR15, HOR99, IPRT00, ILR01, IK00, IK16, IS02c, IS04, ISU12, JRT97, JLLP16, JL18, JFQS98, JS16, JZZ20, JRS10, JS20, Kal18, Kan14, KP99, KS16a, KKS19, KV17, KY21, KYYZ22, KS99, KTT14, KKW05, KKT20, KNP98, KP98]. **Problems** [KSX08, KM21b, Kor00, KJ17, KR02, KR03, Lau00, LS22, LM02, LR10, Lev02, LF01, LN09, LFL09, LST18b, LST18a, LMP⁺18, LBT22, LM21a, LT96, LM16, LM99, LX23, LP06b, LBP20, LLS06, LFJ⁺11, Luc02, LPV05, LV19, LSF⁺23, LS98b, LB00, MN09, MPSU19, Mal07, MC05, MS11b, MP10, MOP20, MG98, MS11c, MS12, MW97, MS06a, MARS10, MGGS09, NARS14, Nem04, NV99, Nes12, NS14, NT16, NS17, NS21, NTZ23, NT19, OOT22, OLR21, PS10a, PZ98, PZ00, PZ03, PT18, POLW20, Pen19, PFA17, PNA10, PQS01, Pot08, Pot12, PW19, Pyt98, Qi99, QP23, QW20, RCGR18, RSS14, RG00, RW21, RFNP14, RQMG12, RSMB19, RM08, RPK03, RR08, RSE18, SS17, Sag16, SNTI16, STKI17, Sch09, SW11, SU14, SDGM99,

SSSZ10, Sha97, SM18, SBT16, SS97].

Problems

[SS22, SL14, Sol07, SKR16, SH97, SZ98, SW99, SSQ04, TF96, TN21, TW14, TZO2, Trö05, THZ23, Tse97b, Tuy00, Ulb01, VJM16, Vil05, Vog08, Voi08, WUR⁺23, WKKM06, WJ00, WST10, WP23, WCP17, WD23, Wri00, Wri02, WPY23, XS16, XA18a, XYZ15, XLZH19, Xu22, YH01, YFHS16, YPC18, YZZ97, Ye99, Ye00, Ye04, Yos07, YPL21, YCST22, Zha94a, ZCD00, Zha00, ZC09, ZZST20, ZL22b, ZWHZ23, Zha98b, Zha20, ZY07, Zhe20, Zhe23c, Zhe23b, ZT98, ZC10, ZCT10, Zhu02, ZLTD22, dKL11, dSTVB18, vAS14, vdLTY07, AM94, BCT93, BKT99a, BD93, BH95, Bur92, CL92, Dax92, DHLN92, DL91, DFKS11, Dun93, FMS94, GMR91, GIJT96, Gow92, Hei93, Hus94, IK92, IK96, Kan96, KSW94, KKM93, KN93, Li93b, MMZ95, MS94a, Mel96, MT91, Out94, PR95, PR93, PY93, Ral96, Rot92, Sar95].

problems [Sta92, TYF96, TM95, YY95, Zen91, ZC91, ZTP93, ZT96, dRT92, HL20].

Procedure

[IPRT00, Lau01, Nes21, VZQD17, Mel96].

Procedures [Che05, GL14a, MW94].

Process [NJS21, SFP11]. **Processes**

[Gha23, GS01, HN07, HG16, RG22].

Processing [CJK98, KB08]. **processor**

[GR94]. **Procrustes** [DL17]. **Product**

[Ans17, AVS19, BCWW15, LWZ15, SGK21,

WPD22, Hus94]. **production** [HH96b].

production-transportation [HH96b].

Products [Sab11, Tse92]. **Profiles**

[DMM06]. **Program** [CM21, FT02, FT07,

Gre00, Las02, NF01, PW19, SKC12,

WKKM06, XSLZ11, Fre95, War96].

Programming

[AAS17, ASNP16, AHO98, AB12, Ani00, Ani02, Ani05b, Ans98, Ans99, AKK14, AD00, AD04, AD09, Aus15, AH05, BC09, BJ22, Bec07, Bec15, BDdSM15, BTZ97, BTN97, BTKNZ99, BGM19, BOT06, Ber17, BNT04, BH03, BZ04, BCW08, BEET12,

BCD⁺18a, BHP18, BLST19, BPS99, BMW10, BHS15, BDL⁺16, Bur03, BL09, BCD20, BMP22, BHN99, BGNW05, BCT19, CT06, CLPT99, CLMP10a, CLMP10b, CGT11, CB00, Cha02, CS08b, CKS15, CF01, Che01, CWH06, CHN18, Chu06, CHY10, CKS17, CC02, CHP⁺09, CR04, CLPA21, CO12b, DGT20, DHL15, Del19, DMZ12, DY04, Den14, DSZ17, DYC⁺21, DSD12, Dol20, DT98, Dos97, DFS03, DdLM21, DM20, DMM22, ER05, ESKL18, FLN10, Fay96, FGL⁺02, Fle12, FBM15, FS08, FG98, FLT03, Fus14, GS21, GM15, GL14b, GM12a].

Programming

[GV15, GCPT18, GL15, GS98, Gon14, GT97b, GKV03, GOST01, Gu00, GAD20, GVJS10, GNL11, Gui20, GMS21, GJR08, Gür10, GL08a, HW10, HTY12, HLWY14, HHY15, HR00, HS19, HL08b, HY96, IdW16, IK16, Jan04, JAL15, JL10, JLLP16, JL18, JPS99, JL16, JKW15, JBK⁺18, JS11, KYYZ22, KPZ19, KM21a, KdK23, Kiw07b, Kor00, LMT09, Las04, LT01, LCC⁺20, LM02, LLD⁺02, LSW06, LZH14, LST20, LM20a, LST21, LFW98, LNQY10, LY11, LP15c, LS20, LCPS20, LL09, LMO06, LY07, LFJ⁺11, LZ19, LZ23b, Luc02, LW08, LPS05, LSZ98, MNP96, MNP98, MR10, MM08, MPRW09, Man04, MÖ07a, MÖ10, MP14a, Mia96, MS11b, MP10, MG98, Mon97, MT98, MT99, MT03, MN14, MOR15, MW06, NA20, NJLS09, NLQT06, OW06, OSS11, Pan05, PC08, Pan16, Pap17, PY19, PVZ07a, PW07, PAV21]. **Programming** [PS98, PR07b, Pyt98, QLSZ18, RB18, RTW97, RKG08, RV06, STKI17, SD00, SZ14, Sha17, SWW21, ST09, SKL09b, STY15, STY16, TF96, THDL22, TWB⁺03, TTT98, Toh00, Tse97a, Tse03, Tse07, VR05, Voi08, WB05a, WB05b, WJ00, WZYB08, WX17, WDLW23, WP23, Wat00, Wri98, Wri99, Wri00, Wri01, WT04, Wri05, WSLZ17, WPD22, Xu06, Xu17, Xu18, YZZ97, YW02, YPL21, ZA14, ZZ96, Zha98a, ZH06, ZWL10, ZST10, ZLCL21, ZCTW12,

ZMB⁺20, dE14, dP02, dKPS09a, dKPS09b, dKL10, dKL11, dKP12, dKV16, dSTVB18, Ali95, AB95, Ans96, Bar93, BT94a, BD93, BL95, BL93, Bos93, Boy95, Bur92, CH93a, Den00, Eck94, FKMN00, GV94, GLW91, Gon91b, Gon91a, GT92, GHS95, Hei96, HRVW96, Ius91, JS95, JYZ94, Jey91, KK92, KN93, Lag93, LS93, LP93, LMS92, MMZ95].

programming

[McS94, Mel96, Mit94, MKT95, Mon98, MT91, MP95, Naz91, Pot96, Pow95, Ren95, SG94, Tod92, TM95, Wri91, ZTD92, ZT93, Zha96, ZR93, Zhu95, dRV92, dRT92].

Programs

[ASS18, AHSS19, Ani05a, Ani05b, AP18, BK12, BHM18a, BHM18b, BPL12, BYZ00, BZ08, BDDM19, Bol14, BJS07, BR19b, BD09, BKS16, BMZ01, BV06, BK10, Cal10, CG08, CKL⁺14, CODL22, CB14, CSW15, CC14, Chu18, CP17, CO12a, CPS18, DLM21, DO06, DFNS05, DR00, DU21, EOL98, EMN22, Ent96, EI06, ESKL18, FJS98, Fil99, FLRS06, FT08, FKS02, FSF12, FP98, Gfr13, Gfr14, GY17, GVA11, Gha17, GRS21, GJLVP14, GNS08, GK96, GR12, Gui16, GKS18, GLY12, GYZ14, GLYZ14, GXZ17, HNO15, HN19, HAN11, HRS06, HLL98, HK09, HS11, dMM10, HMP⁺08, Ios01, IPS11, IS08, JR08, JLD03, JR00, KDB09, KN02, KN04, KN05, KFF09, KS10, KS14, KLLM22, KK05, KM19, KMM19, Küc08b, KTSB21, LLS05, Las02, LP17, LLCN06, LS97b].

Programs [LP06a, LZ03, LS04, LXL11, LX14, LPR98, MP16, MP19, Mat05, MÖ09, MX06, MZ99, MP07, MLLB08, MDV12, MN13, MOS14, NST18, NS07, NWY17, NRS21, OHF12, OR11, PH23, PS21a, Pat17, Pat98, Pul97, Pul00, RB05, RP23, Rev97, RW07, RP12, SÖ17, SFM14, Sch01, Sch96, ST03, Sch98, SdM00, SA04, SD20b, SAZ22, SW14, SW15, SL15, SKB18, SU10, SK98, SXMW13, TAW06, TK02, Toh03, VZQD17, WY15, WBME14, Xu06, XY10, XHL14, XYZ15, Xu20, YK18, YZ10, YZ16, YT02,

YN17, ZK14, ZJS18, ZL02, AW94, BMR94, BQ95, CH93b, Dun93, GK94, Iof94, Li96, MS94b, RS96, Ver96, OOR17]. **Progress** [McB98]. **Progressive** [AD09, BCD⁺18a, XZ14b, ZSX19]. **Project** [BV06, Che05, Lau01]. **Projected** [BMR00, CWW18, FPT22, Gar21, GP19a, Hei96, Mal15, NLQT06, SU15, SY13, ZC09, Gar93, Gur94, ZR93]. **Projected-Gradient** [Gar21]. **Projecting** [BBW18]. **Projection** [AM12, Alv04, BSW23, BF08, BLY14, CS08a, Dai06, Gis21, HZ16, IT18, KL97, Kiw07b, KCS97, LH04, Man99, NRP19, Tse97a, Tse98, WB16, LT93, Tse91].

Projection-Based [KCS97].

Projection-like [AM12].

Projection-Proximal [Alv04, Tse97a].

Projectional [YY23]. **Projections**

[BBCS21, BCGH08, CH02, Dos97, Gar21, GN11, LLAN22, MHL15, MSG20, SB18, CGST93, Sha94]. **Projective** [JE19, Pan05, Por20, GV94, SG94].

Projectors [BWWX15, Rut17]. **Proof**

[Bar08, KS91]. **Proofs** [DG09, Mas20].

Propagation [MSG20]. **Proper**

[GHNS19, Qiu08]. **Properties**

[ASS18, ABF14, AVS21, BMW16, BGH19, CN17, CS15, CGST96a, CGST96b, CGT10b, CPRZ20, DHL⁺99, Dai02, DL01, FFK98b, GO16, GJT23, KS14, LRWW98, LP17, LP22, LW15, LR22, LPR98, MU18, PP16, PR96, Sch01, TSP18, TWB⁺03, YFHS16, BT94b, GN92, Kan96, Pow95]. **Property** [AGH10, BP15, BR19a, DY99, DK13, DLW99, HP07, HDL21, KYYZ22, NYF11, OOR17, OR11, YY23, Zas13].

Proportioning [Dos97]. **Proto** [AB18].

Proto-differentiability [AB18]. **Provably**

[LL00, MGR18]. **Provided** [ANRV04].

Proving [GW19]. **Prox** [ANT16, ACP11b,

BBN14, CWP20, LM21b, Luk08, Nem04].

Prox-Bounded [CWP20]. **Prox-Method**

[Nem04]. **Prox-Penalization** [ACP11b].

Prox-Regular [Luk08]. **Prox-Regularity**

[ANT16]. **Proximal** [AA20, Alv04, ABO22, AD19, AFFG14, ARS07, ACR19, AL20, AT06, BGLW08, BH18, BFO19, BNL⁺16, BNL⁺18, Bia16, BIS05, BCN19, BB23, BDL23, BCLN22, BI98, BD10, Cab05, CMY15, CWP20, CMSZ20, CL14, CP08, CC02, CY14, DG23a, DN20, DT98, FK00, FR15, GY20, GP19b, Har09, HS10, HLY16, IPS03, JST12, KT03, KV17, KRR99, Kiw06, Kiw07b, KMM19, KM21b, KMM23, LSS14, LM12, LST16, LM21b, LLX15, LMH19, LX23, Lu17, LZ19, MOT95, MM08, MIM20, MS10, MS12, MS14, MSS15, Nes21, NT19, PC08, PLS08, RSMB19, ST14, TY12, Teb97, TDKC14, Tse97a, Val20, VGO18, WST10, WLLY16, WB22, WLN23, WLS23, WCP17, XZ14a, XZ14b, Xu17, Xu18, YF00, YST14, YT22, Zas10, ZL20, ZZST20, ZN14b, dEH01, BT94a, CT93, Gül92, Kiw96, Zhu96]. **Proximal-Gradient** [AA20, BB23, XZ14a]. **Proximal-Like** [PC08, Teb97, CT93]. **Proximal-Point** [Nes21]. **Proximal-Projection** [Kiw07b]. **Proximal-Type** [KT03]. **Proximally** [DG19]. **Proximities** [PRT02]. **Proximity** [AB18, FGG04, MST11, PTZ05]. **Psd** [Shi18]. **Pseudo-Normality** [BYZ19]. **Pseudospectra** [LP08]. **Pseudospectral** [GO12]. **Public** [BPS06]. **Pump** [BEET12, DLR14, DIMS18]. **Pumps** [GMSS17]. **Pure** [BDM16, RSE18, ZK14, Wri95]. **Pure-supply** [RSE18]. **purpose** [NS91]. **Pursuit** [SMG14]. **Pushforward** [LMMZ21]. **PVM** [CF01].

QNG [HZZC22]. **QP** [BCWW20, CWH06, QQ00]. **QP-Free** [CWH06, QQ00]. **Quadratic** [Ani00, Ani02, Ans00, AKK14, BT00a, BE06, Bec07, BDdSM15, BTNR02, BCRZ21, BC14, BM17, Bol14, BSTV18, Bom15, BLST19, BR08, BDPP14, BHS15, BDL⁺16, BMZ01, BL09, BCW14, BCWW20, BGNW05, CX99, Che15, CM21, CHNT21, CL96b, CDZ17, CO12b, CJRW14, DZ07, Del19, DMS22, Don16, Dos97, DFS03, DK10, DL13, DFR18, Fay96, Fay06, FRMP18, FBO21, FPT22, FLT03, GVA11, GL15, Góm21, Gon14, GT97b, GAD20, Gün14, Hag01, HS21, HLNZ08, HDL21, HR15, JLL09, JL18, JL16, JKW15, KN05, KKT20, KL10, KMM19, Kuč08a, KR03, KGM23, LT01, LTY12, LRP16, LS97b, LSW06, LY11, LS20, LCPS20, Loc15, LMO06, LFJ⁺11, LPR98, LS98b, LSZ04, LSTZ07, LZ10, LB00, MNP98, MP10, uDR15, MT98, NST18, NRS21, OOT22, Pan16, PH23, Pap16, PRRL97, PY97, PW17]. **Quadratic** [RQMG12, SD20a, SKC12, SBT16, SV07, SLWX23, Sor97, SK98, SZ98, TF96, TY12, Tse03, VZQD17, WX19, WP23, WT04, WSLZ17, XSLZ11, XHL14, XA18b, YY03, YmZS15, YZ03, YZS19, ZH06, ZW18, ZSX19, ZLCL21, ZPXQ21, dSTVB18, Ans96, AFGG11, BD93, BL95, CLMS93, CH93a, CH93b, FM94b, GLW91, Hei96, LS93, Li96, Mar94, MMZ95, MT91, MP95, NN91b, Tha93, ZTD92, ZR93, Zhu95]. **Quadratic-Linear** [FBO21]. **Quadratically** [Ani02, AKK14, Bom15, FLT03, JL16, LFJ⁺11, SP97, SLWX23, XHL14, GLW91, PY93]. **Quadrature** [CRY99]. **Qualification** [AMRS16, AFSS19, BJ22, BHP18, CHL16, Dol20, GM15, GVJS10, IS02b, JLD03, Li97, LJ02, LN03, LN05a, SN07, VR05]. **Qualification-Free** [SN07]. **Qualifications** [AHSS12, BH19, BKMW20, BHR19, FLN10, GY17, GW19, IS04, Kan14, KS10, LNS00, LNP08, LZH14, LNYZ21, Ye00, ZN04, ZN07b]. **Quantification** [HTT⁺15]. **Quantitative** [AW93, BS98, LN18, LRX14, ZXZ16]. **Quantum** [BBW05, BFS16, FS23, LP15a]. **Quartic** [LZ10, QWY04]. **Quasi** [AFSS19, ABO22, ADR22, AH05, AVS19, BYZ19, BFO19, BBN19, BCW08, BHNS16, Ceg15, CRZ18, CP15, CG17, FB00, GL01,

HZZC22, HR12, HR14b, HGA15, KS19, KV17, Kau99, LZH14, LMH19, LV08, MSQ98, MER18, MN00, MO07b, PCA19, RN21, SXBN22, SY13, SGK21, SH97, WN16, WMGL17, YNS20, ZW12b, ZNW99, BLN92, EM91, Fle91, Gil97, LN93, TK96, ZNB⁺93]. **Quasi-** [BYZ19]. **Quasi-/Pseudo-Normality** [BYZ19]. **Quasi-Cauchy** [ZNW99]. **Quasi-Convex** [FB00, AH05, SGK21, TK96]. **Quasi-Fejér** [CP15]. **Quasi-monotone** [AVS19]. **Quasi-Natural** [HZZC22]. **Quasi-Newton** [ABO22, BFO19, BBN19, BHNS16, GL01, HGA15, KV17, Kau99, LMH19, LV08, MSQ98, MER18, MN00, PCA19, RN21, SXBN22, SH97, WN16, WMGL17, YNS20, BLN92, EM91, Fle91, Gil97, LN93, ZNB⁺93]. **Quasi-Nonexpansive** [Ceg15, CRZ18, CG17, SY13]. **Quasi-normality** [AFSS19]. **Quasi-Relative** [BCW08]. **Quasi-Slater** [LZH14]. **Quasi-strongly** [ADR22]. **Quasi-smooth** [ZW12b]. **Quasi-Variational** [AVS19, KS19, HR12, HR14b, MO07b]. **Quasiconvex** [BGJ12, DHML01, LP06a]. **quasidefinite** [Van95]. **Quasidifferentials** [Dol20]. **Quasimonotone** [AG14]. **Quasimonotonicity** [CH94]. **Queuing** [BLS21]. **Quickest** [Fle01]. **Quotient** [WX19].

Rachford [BM16a, BD17, BM20a, BH14a, BAR21, CM16, DP19, Dav15b, HLWY14, LR21b, LM20c, TP20]. **Radial** [FB03, Gri18, KM09, WS11]. **Radiation** [Gor22, RADK05]. **Radio** [BBF⁺04]. **Radiosurgery** [FLS03]. **Radius** [GO12, WD05]. **Random** [ALR03, BKL19, Cal10, CCH05, CC14, CN23, CP15, Har98, LZ18, LMQ23, NST18, NC16, QCLP19, Sch98, SMG14, WB16, WPD22, CJ18]. **Randomization** [DIMS18]. **Randomized** [AH16, BBN14, BH20, BT21, CG08, CLL23, DSP10, DBW12, GHHL05, JRJ10, LLX15, Lu17, LM20b, MKU21, NRP19, RK20, SFM14, XXS21]. **Randomly** [FPT22]. **Range** [LM21b]. **Rank** [BDdSM15, BDDM19, BV18b, BMZ01, BKS96, CGO22, CGT14, CSPW11, CV17a, CNW10, DG09, DU21, DV14, DV16, FGM17, Gar21, GG18b, HLB20, HU19, JBAS10, LYP23, LLT22, LZSV20, LL23, LWZ15, LBP20, MS11b, MMBS14, SU15, Shi18, SVD14, TY11, TQP22, Van14, WW20, WDLW23, XFLP21, YFHS16, BT94b, Bos93, FRW11, KBS93, LdQ11, MSFL17]. **Rank-** [SVD14]. **Rank-1** [YFHS16]. **Rank-Deficient** [CGT14, CNW10]. **Rank-One** [BKS96, DV14, Bos93, KBS93]. **Rank-Sparsity** [CSPW11]. **Rank-Two** [BMZ01, BT94b]. **Raphson** [HN05, YLG22]. **Rapid** [BLMH06, BCW14, Wri05]. **Rare** [TSR22]. **Rate** [AP16, BCS21, BLY14, BLT17, CY14, Dav15b, Dav15a, GY20, GOP17, GOP19, Kuč08a, LY98, LYS17, MER18, MGR18, MOP20, NO09, Nem04, SdM00, ST14, SSD22, TY12, VGO18, VJFC18, WLN23, Xu22, YNS20, YN17, YPL21, Ius91, Tse91]. **Rates** [AHO98, ASSS23, AC18, ADR19, ADR22, BGN22, CR97, DG23a, DG23b, GW19, Gri19, GP19b, HN07, dM08, HLY16, JE19, KY21, LYSA20, NRP19, PGGH18, Peñ23, Sch96, SDR20, TDZ20, WLKK23, Yin99, dKHL17]. **Ratio** [CCM23, CYZ22, DK22, LMX17]. **Ratio-Bounded** [CCM23]. **Ratio-Cut** [DK22]. **Rational** [DP22, EZ10, LMMZ21, MEV23, NTZ23]. **Ratios** [BDL23]. **Ravine** [AF22]. **Rayleigh** [WX19]. **Raymond** [CHPA16]. **Rays** [GdW00]. **Real** [GE14, JM18, KFGT21, Las05, MS20, Nie14, SVD12, Vel15]. **Realization** [DKVW17, Gil97]. **Realizations** [GHR14]. **Recession** [GU22]. **Recessive** [BBMW16]. **Reconstruction** [JS00, Nol98]. **Recourse**

[GNS08, LCPS20, RvdVH15, RSvdVH16, Sch96, ST03, SL15, CJ18, RS96].

Recovering [TY11]. **Recovery** [CGO22, DL17, FRW11, LZSV20, TQP22].

Recursions [PGGH18]. **Recursive** [GST08, XKK22, YLZ02]. **Redistributed** [HS10]. **Reduced** [AW00, CT06, CCR17, CK99, GL01, GL03, Kau99, SKM19, XB99, BNS95, Gil97, Kup96, LT93].

reduced-gradient [LT93].

Reduced-Hessian [GL01, GL03].

Reduced-Space [CCR17]. **Reducibility** [DGJ09]. **reducible** [DMZ94]. **Reducing** [AILT14, Bar93, LX23]. **Reduction** [BR08, DL22, DKVW17, FdOF07, Ios01, LJOT17, JH14, JS11, LMT18, MP99, MNR⁺22, PRRL97, PFA17, RK19, TAW06, Tüt03, XSLZ11, XZ14b, XKK22, YCST22, YM14, ZX21, BTN94, Fre95, Gon91b, MKT95, Ye92, dRV92]. **Reduction-Based** [PRRL97]. **Reductions** [KW10].

Redundancy [BLS21]. **Reference** [HS17].

Reference-Based [HS17]. **Refined** [BT20].

Refinements [vdLTY06]. **Reflected** [Mal15]. **Reflective** [CL96b]. **Reflexive** [Den97, KRS11, MM11, Sab11].

Reformulation [ALT⁺21, AM00, BKS16, DZ14, FFK98b, HMW21, TN21].

Reformulations

[AZ08, IS02c, JL19, KKT20, LP15c, PTJY10, PH18, WSLZ17, XA18a]. **Regime** [YKI04]. **Regimes** [JS16]. **Region**

[AINT17, Ans17, ANP08, ABO22, BSV14, BP15, BV18a, BP97, BV18b, BA13, BKS96, CNY14, CDM20, CGST96b, CSV09, CRRW21, DO19a, DV97, DEAM97, DEAW99, EA99, EG10, FGL⁺02, For05, GJV16, GLRT99, GST05, GST08, HV01, HR14a, HNKK17, HM02, JW21, JFQS98, JL19, JL20, Kau99, KS99, KPZ19, LMT09, LM02, LLRV19, LY07, MWDS18, Mon23, Ni05, NR20, QQS03, RSS00, hRK14, SHP18, SY19, TA98, TE19, Tse02, Ulb01, WD05, Wal08, WX20a, WLM22, WLKK23, WS11,

WT04, YB16, ZA14, ZSL17, Bur92, CL96a, CGST93, EA95, EGG09, Qi95, Sar95, SW95, WZ95]. **Regions** [ABK22, Lu14].

Registration [CKS15]. **Regression** [BLG13, GP04, HPD14, HL17, HL20, OC23, RR15, SFP11, XD20, YZ13, LS93]. **Regret** [GZ17, MMN⁺22]. **Regular**

[Ber17, CRZ18, Den00, FS17, Luk08, PRT02, PTZ05, Trö05, YZZ17]. **Regularity** [ANT16, AAI07, AI20, AK21, BCW08, CKLP07, CS08b, DR96, DL13, DPS17, EA99, FFK98b, Fus14, GO12, HL14, Iof11, IS02b, KKT15, LP22, Li97, LNP07, LN14b, MPR10, NT08, SYZ19, WG19, WLKK23, ZFL06, ZN04, ZN08, ZN15, ZZ16, Wan95].

Regularization

[AL21, BC05, BBT06, BGMT19, BC14, BM17, BM18c, BCD⁺19, BKS16, BH15, CGRV21b, CGT14, CGT19, DV23, FT08, GJT23, HYF05, JLW16, KDB09, Kal18, KS12, KS14, LS97a, LV07, Lie20, LXL11, LMZ21b, MPRW09, Mar17, MZGS08, NP23, NW12, PTJY10, RG00, Sch01, Sch12, TY12, Wan11, WDST14, YST14, YZS19, IK92].

Regularizations [MB14]. **Regularized** [AMS16, ABO22, AO18, AP18, CMYZ22, CD19, CGT10a, CW14, CSW15, CCR17, DLR16, GMM17, GN17, GN19, KV17, KSX08, LTAP22, LBT22, LLX15, LBP20, LSF⁺23, MX06, Mis23, NT19, OHF12, PR96, Qi99, TQP22, Wri12, WPY23, ZCH⁺23, Dax92]. **Regularizer** [CDR22].

Regularizing [BDL18]. **Reinforcement** [KLL22b, LZCW23, ZCH⁺23]. **Related** [AFSS19, AK21, AT00, BM02, FS97, Gar21, OR02, SS22, SH97, WDST14, Dun93].

Relating [Chu03]. **Relation** [ZNW99].

Relations [BWY10, EF02, MS06b, ZT92].

Relationship [HN07, Zha96]. **Relative**

[BCW08, CS16, DFO20, FS23, GTdS06, Luk08, Ric11, SPM18, YY23, Dix91].

Relatively [LFN18]. **Relatives** [dCST15].

Relaxation

[BHKM14, BPT97, BT19, BDSS22, Bom15,

BMZ01, CC18, CBJF97, CCF⁺20, CM21, CDFG23, Che05, CH13, FK00, GW18, HLNZ08, KKW09, KL10, Kiw07b, Las14, LFJ⁺11, LLZZ19, LZ10, MLLB08, MST11, NWY17, SU10, Tse03, Tse07, WZZ22, Wri12, ZLCL21, DFNS05, PR93].
Relaxation-Based [MLLB08].
Relaxations [Ans00, AD15, BHT16, BDPP14, BV06, CP18, CCM23, CS16, CDFG23, DW10, GVA11, GLRS15, GR03, HLTW14, JLLP16, JL18, KH05, Kea11, KKW05, KT00, KS18, Las04, Las06a, LM19, Lau01, LNQY10, LDLS20, MCB09, ND09, NW12, NRS21, PNA10, PW19, STKI17, SL14, WKKM06, WZYB08, ZCTW12, dKPS09a, dKPS09b, dKL11, PR95].
Relaxed [Alv04, CS08a, LM20c, MS11b, RW16].
Relaxing [Don16, GW19]. **Relevance** [CGT14]. **Reliable** [OS17]. **Remainder** [Car23]. **Remarks** [Li93a]. **Remediation** [Kel99]. **Removal** [Ete22]. **Renormings** [LPT07]. **Reoptimization** [BDL⁺16, GG03]. **Representability** [HN09]. **Representable** [NPS10].
Representation [BF08, HW07, Las16].
Representations [CV17a, GWZ15, KW10, RV06, VS10, Den00].
Representatives [FBH22]. **Representer** [BCD⁺19]. **Rescaling** [dEH01].
Reshuffling [LMQ23]. **Residual** [CWZ12, DO19a, RR15, TK02]. **Resolution** [AFS01, FMS94]. **Resolvent** [BBMW16, BBW17, Wan11]. **Resolvents** [BWW12, Sab11]. **Resolving** [Fle14].
Resource [AH19, BBG⁺20, CJK98, Ete20, GKPV01, HS23, LdF08, VJM16]. **Respect** [OR16, QZ08, YP20, ZZ16, ZZN18].
Response [CCM20, CCM23, LS22, CSY23].
Restart [Rd20]. **Restoration** [BFMS14, BM20b]. **Restricted** [HL08a, Kiw96, LPW12, Sch16]. **Result** [AG14, Zas00, Fle91]. **Results** [AHO98, ATU23, ACB20, AVS21, BW05, BR19b, CT12, Cel07, DMVV17, Ent96, EL10, FIS10, GLR15, GS07, GO12, HL08a, KN02, KN04, KS10, KLT07, Kum16, Lás17, LS20, MS03, SU15, TP20, Tse03, YZ03, YWAS17, AW94, Luc92, SZ92]. **Retraction** [HAG18, SKM19]. **Retractions** [AM12, BC03]. **Retrieval** [RSMB19].
Reverse [BCT93, Jey03, Lem98].
Reverse-Convex [Jey03]. **Revised** [Pan05, SE99]. **Revisited** [LMV23, LS21, Rot09, SSD22, YT22].
Revisiting [DG23b, Kol05, LL20, LSS22].
Reward [LMX17]. **Reward-Risk** [LMX17].
Reweighted [Bec15, BDMS09, BCWW15, FRW11, ZL12].
Ridge [XD20]. **Riemannian** [BV18b, BV21, FLP19, GSAS21, HMJ⁺23, HU17, HHY18, HGA15, HAG18, LMWY11, LCD⁺21, MMN⁺22, MS16, OOT22, RW12, SI13, SKM19, Sat22, SK22, Van14, WLWY15, WWLY21]. **Right** [GST11, Gre00, HCH12, KRT07].
Right-Hand [GST11, HCH12, KRT07].
Right-Hand-Side [Gre00]. **Rigid** [GAP08, TP02]. **Rigidity** [ZSY10].
Rigorous [Jan04]. **Rim** [GHRT98]. **Risk** [BCD20, Cal07, CGC15, CKS17, DR23, ER05, FWKS15, GC23, GSU21, GZ17, GR12, Gui16, GKS18, HG16, KP22, KS16b, LLS05, LZ23a, LLX15, LMX17, MP19, OR02, Pic13, RS15, RR15, ST03, WX20b, WZZ18].
Risk-Adjusted [LLS05]. **Risk-Averse** [BCD20, FWKS15, GSU21, Gui16, KS16b, LZ23a, MP19, GKS18]. **Risk-Aware** [KP22]. **Ritz** [KS05b]. **Robinson** [AI20, GM17]. **Robust** [ASNP16, ALSV18, AZ08, AFGO20, BHM18a, BTN97, BTNR02, BdHP21, BLRS22, BG22, BLO05, Cal07, CM17, CSY23, CDL14, CCN⁺18, Chu18, Chu20, DSZ17, DMVV17, DKVW17, DM20, DMM22, EOL98, EL14, GB22, GV15, GJLVP14, GXZ17, HXH22, HMN10, HF14, HS17, Ios01, JL10, KPV18, KGM23, LM19, LLD⁺02, LZSV20, LS04, LX14, LMX17,

MP14a, MLC22, MU20, MP14c, NJS21, NJLS09, PS21b, RBDM22, RG22, Sha17, SZL23, She14, VV21, VVM⁺09, WX20b, WX22, XS16, XA18a, ZXZ16, ZAL21, Bur92, CJ18, EA95]. **Rockafellar** [CHLC19].

Rockafellar-Type [CHLC19]. **Role** [ZM96].

Root [AK21]. **Rotation** [GH15, SPW15].

rotundity [BL94]. **Rounding** [IPRT00].

Routing [LL00, RT05]. **Row**

[HAN11, ZC91]. **row-action** [ZC91]. **Rows**

[AWW09]. **Rule** [BM98a, GJ99, LL23,

Luc02, Tse98, WJ00, YK18, ZN07a]. **Rules**

[BPL12, CPRZ20, DKS22, DS12, HLZ08,

HJB20, Har98, LN11a, MPA21, QCLP19,

Ye04]. **running** [CD92]. **Ryu** [BSW23].

Saddle

[BBN14, CLO14, DDD22, HA21, HM15, HM16, HZ06b, MOP20, MS11c, Nem04, PMR19, SLM05, WD23, Xu19, ZWHZ23].

Saddle-Point

[BBN14, HM15, HM16, HZ06b, MS11c].

Saint [CHPA16]. **Salesman** [BM02, GW18, dKPS09a, dKPS09b, HP94, JSV91].

salesmen [BCQW95]. **Same** [Pat17, Xu22].

Sample [CWZ12, CSS19, DL22, EN14, GY23, GP04, HCH20, KSdM01, LL22, LS22, Liu20, LA08, MX06, PS21a, POLW20].

Sample-Based [DL22, POLW20].

Sample-Size [LS22]. **Sampling**

[BBN18, BLP23, BLO05, CMYZ22, CERS18, CP17, CV07, GS21, GR12, Gui16, dM08,

HU17, HU19, KLW18, Kiw07a, Kiw10,

LOZ23, LMW16, LMZ21a, MWDS18,

PGGH18, RK20, SHP18]. **Sampling-Based**

[GR12, Gui16]. **Satisfy** [Aus10]. **Scalable**

[CJSY07, SÖ17, XD20, ZA14]. **Scalar**

[ABCdC23, HN19]. **Scalarization**

[BKR17, Eic09, Kas10, Qiu08]. **Scalarizing** [LPV05]. **Scale**

[ABCFR20, AT03, BBN14, BYZ00, BH03, BKT99b, BHN99, BHNS16, CB14, DGN12, DFO20, DNSD13, FJS98, FLP02, FM97, For05, GMS02, GL03, Gou99, GST11,

HZZC22, Ios01, JST12, JS00, JM18, LNP98, Lie20, LRR98, Mai15, Nes12, NS14, NLQT06, NW12, Pyt98, Ray97, Ric11, RSS00, SD00, Sor97, TK02, Toh03, WG10, XS99, YCST22, ZLCL21, AM94, BNS95, BKT99a, Dun93, GMR91, GR94, NN91a, Ove92, RD95].

Scaled

[HL02, Lev02, NT98, RC22, ZCD00, dPRT01].

Scaling [ACR19, BBR16, CB00, GLHZ11,

IS02a, JRT97, MT98, Pot08, Qi16, TP16,

KK92, Lag93, LN93, Mas97, MW96, RV93,

Rot92, TM95]. **Scenario**

[ACB20, CGC15, GC23, Ram18, ZAL21].

Scenarios [MP14b, RBDM22]. **Schedule**

[CF99]. **Scheduling**

[BLS21, CKL97, CJK98, Rot09, AEGS93].

Scheme [BTT96, CBJF97, Dav15b, EQR22,

JLZ20, KDB09, LZ10, MU20, PB17, Sch01,

SU10, Vil05, Wu96, DFNS05, EA95].

Schemes

[ACP11a, BTC08, Bec15, CC02, Dav15a, EL14, GAP08, HLL98, LS22, ZM96, GK94].

Schrijver [Che05, Lau01]. **Schur** [CC18].

SDLCP [SSK98]. **SDP**

[CP18, JST12, KKW09, Las06a, LM19,

LM04, NW12, SSK98, dCST19].

SDP-Relaxations [Las06a]. **SDPs**

[BPC11]. **Search**

[Abr05, AA06, ANRV04, AF01, ALR03,

AD00, AD04, AD06, ACD08, ADL08,

AILT14, ALT19, AH16, BCS21, BGP09,

BLPP16, BPS99, BK10, Cri22, CV07, DK13,

Dan21, DIPR20, DLT03, GV14, GRVZ15,

HZ05, HA21, Har98, HHY18, IJOT19, KN02,

KN04, KSS99, KT04, Kol05, KLT07, LT99,

LT00, LT02, LM05, Nes21, OLR21, Pap16,

PS20, PW06, RW18, SU15, SK06, SSK98,

Toh00, Tor97, Tse99, WB05a, WB05b, WG10,

XFLP21, YPL21, ZH04, dPRT01, dBdH07, And96b, DEG⁺91, DT91, MW94, Tor91].

Searches [AD03]. **Searching** [CF99].

Secant

[HL98, YMT04, DEG⁺91, Hus94, WZ95].

Second

[Abr05, AA06, AXY23, ASS18, Aus10, Aus15, BT04, BHM18b, BDS10, BF08, BGM19, BGY⁺23, BCS99, BCD18b, BA13, BCT19, CT06, CT02, CdIRT08, CT12, CM20, CM22, CYZZ19, CW18, CSV09, CRRW21, DSK20, Dun93, EI06, FS12, FSF12, FLT01, Gfr07, Gfr11, Gfr13, GM19, GVA11, GL15, GR10a, GR10b, HYF05, HW10, HS06, HL23b, HLP23, HMN10, Her09, HNKK17, HN04, JL18, KFF09, KM21a, LST21, MLC22, MS03, MS14, MO01, MR12, MOS14, MOR15, NR20, OOR17, OR11, PC08, PRT02, PQS01, RT06, RW18, RR08, See92, SKR16, SXMW13, TW14, Tse07, WY03, YZ16, ZY14, SC91].

Second-Order

[Abr05, AA06, AXY23, Aus15, BT04, BDS10, BF08, BGM19, BGY⁺23, BCD18b, BCT19, CT02, CdIRT08, CYZZ19, CW18, CSV09, CRRW21, DSK20, EI06, FS12, FSF12, Gfr07, Gfr13, GM19, GVA11, GL15, HYF05, HW10, HS06, HL23b, HLP23, HMN10, Her09, HNKK17, HN04, JL18, KFF09, LST21, MLC22, MS03, MS14, MO01, MR12, MOS14, MOR15, NR20, OOR17, OR11, PC08, PRT02, PQS01, RT06, RW18, SKR16, Tse07, WY03, YZ16, ZY14, Dun93].

Second-Order-Cone [BA13, FLT01].

SECQ [LNP07]. **Seidel** [Xu18]. **Selecting** [MR10]. **Selection**

[DDW20, Lu09, MS11a, RTBG20, dEH01].

Selective [DLR17]. **Self**

[CM11, FS23, Fay02, Gül97, HL02, KU15, Lu17, MSS15, NT98, PRT02, PTZ05, PFA17, ST10, Wan11]. **Self-Concordance**

[Gül97, CM11]. **Self-Concordant** [FS23, Fay02, KU15, Lu17, MSS15].

Self-Correcting [ST10]. **Self-Dual**

[PFA17, Wan11]. **Self-Regular** [PRT02, PTZ05]. **Self-Scaled** [HL02, NT98].

Semi

[BHT16, BK10, CCP22, CLPT99, CKLP07, CLMP10a, CLMP10b, CKL⁺14, CODL22, CHY10, CLPA21, FS08, GAP08, GJLVP14, GVJS10, GJR08, Gür10, HW10, HG16, JS97,

JS11, Kan14, LP10, LNS00, LZH14, LFW98, LW08, LSdZ18, MP14a, MLLB08, MN13, NKT10, NLQT06, OHF12, Pap17, Pha20, PQS01, RPK03, ST09, VR05, WY15, ZWL10, ZY07, ZW12b, GHS95, JRW94, KN93].

Semi-Algebraic [LP10, Pha20].

Semi-differentiability [LSdZ18].

Semi-Implicit [GAP08]. **Semi-Infinite**

[BHT16, BK10, CLPT99, CKLP07, CLMP10a, CLMP10b, FS08, GJLVP14, GVJS10, Gür10, HW10, JS97, JS11, Kan14, LNS00, LFW98, LW08, MP14a, MLLB08, OHF12, Pap17, PQS01, ST09, WY15, ZWL10, CCP22, CKL⁺14, CODL22, CHY10, CLPA21, GJR08, LZH14, MN13, NKT10, NLQT06, RPK03, VR05, ZY07, ZW12b, GHS95, JRW94, KN93]. **Semi-Markov** [HG16]. **Semialgebraic** [BHP18, BLY14, DIL16, EZ10, JAL15, JPT13, KS18, Las09, LP17, LP22, Sch05, VS10, MHL15].

Semicoercive [KP98]. **Semicontinuity**

[DLV10, LW08, GLT97]. **Semicontinuous** [CH13, NZ01, PZ98, WSLZ17]. **Semiconvex** [HPD14, NP23]. **Semidefinite**

[AHO98, Ans00, AW00, Aus15, BTN97, BTKNZ99, BYZ00, BNT04, BDSS22, BPS99, Bur03, CS08b, CV17a, CKS15, CQT03, CM21, CSW12, Chu06, CR04, DGT20, DKM18, DYC⁺21, DU21, DT98, DdLM21, DPW15, EOL98, EMN22, FSP15, Fay96, FKS02, Fus14, GV15, GS98, Gu00, GWZ15, GW18, GL08a, HdR02, HLNZ08, HR00, HN09, IPS11, JRT97, JAL15, JLLP16, JPS99, JL05, JBAS10, KN02, KN04, KN05, KTT15, KdK23, KL10, Kiw07b, KSH97, KSS99, KW10, Las02, Las14, Lau01, LP15a, LM02, LLD⁺02, LT10b, LNQY10, LP15c, LM05, LLZZ19, LSZ98, LZ10, MHL15, MPRW09, Mat05, MÖ07a, MP10, Mon97, MT99, NWY17, NYZ18, NF01, OG03, PA14, Pap17, PY19, Pat17, PVZ07a, PW07, PS98, RB18, RTW97, RV06, STKI17, SPW15, Shi17, dCST19, Sim11, SL14]. **Semidefinite** [SWW21, SKL09b, SSQ04, STY16, iT17,

TTT98, Toh00, TZS02, TK02, Toh03, Tse03, WKKM06, WZYB08, WDLW23, WZZ22, XHL14, Zha98a, ZH06, ZST10, ZVP06, dE14, dPRT01, dKPS09a, dKPS09b, dKL10, dKL11, dKP12, dKV16, Ali95, FKMN00, HRVW96, Mon98]. **Semidefinitely** [NPS10]. **Semidiscrete** [BK21a]. **Semilinear** [CDL16, CdlRT08, CHW12]. **SemiProximal** [STY15]. **Semismooth** [FFK98b, HMW21, HIK03, HH06, KFF09, LdQ11, LST18a, LST19, LLST19, MU14, MXC⁺19, Sch08, Sta04, ST09, Ulb01, Ulb03]. **Semismooth*** [GO21]. **Semismoothness** [DSST20]. **Sensing** [AI11, AI12, CWW18, ZYP21]. **Sensitivities** [QGD18]. **Sensitivity** [AB18, AC02, DMZ12, DHR07, DR14, FMP18, GG08, GZ17, Gre00, GYZ14, GLYZ14, HKP18, Lew02, MCL10, MS94b, NA20, SAZ22, SKB18, YT02, ZML21, Iof94]. **Sensor** [CJSY07, KKW09, KW10, Tse07, WZYB08, ZSY10]. **sensors** [AW94]. **Separable** [BPT97, BCU00, CTW19, Chu16, DNSD13, DK10, GV15, HKP18, HTY12, HHY15, Kuč08a, NZ16, PS10a, SBT16, SK98, SAV14, Sva02, dEH01, CH94, GW93, KSW94, YG91]. **Separated** [Pul00]. **Separation** [GNRPT16, Kas10, LBH22, MSG20, ZN11]. **Separator** [GHW08]. **Sequence** [ZW12a, Ans91]. **Sequences** [ASSS23, CRZ18, HNP00]. **Sequential** [AMS10, AHSS19, AFSS19, Ani02, BPL12, BBT12, BCRZ21, BL95, BCW14, BCWW20, CO12b, CJRW14, CWZ18, DSD12, Fle12, FLT03, GS21, GPR02, Har98, HSS20, HR12, IK16, JLD03, JKW15, KLLM22, LT01, LdQ11, LY11, LLS10, OOT22, PS21a, PW98, SKL09b, WP23, WT04, YLQ03, YPL21, AEGS93, Hei96, MP95]. **Serial** [BM94a, Pan94]. **Series** [ASZ08, Góm21]. **Set** [ACN15, ACS14, AAZ15, AI20, ALSV18, BHHK00, BGP09, BRZ20, BDL⁺16, CWH06, CYZZ19, Cri22, CST19, CH16, Dah99, DIS04, DLR16, DLW99, DGL10, DFR07, EQR22, EI06, FJS98, FT02, FT07, Gfr11, GLRS15, GLdS05, GTdS06, GL15, GT97a, GLTP98, GJ99, GE14, GR03, GVJS10, HZ06a, HIK03, HR15, IY09, Iof11, IT18, IS08, JPT13, Jey03, JKW15, JRS10, KLT07, KR02, KR03, Las05, LP22, LT10a, LST18b, LNS18, LN11b, LPV05, Luk08, OW06, PZ98, PZ00, PZ03, PW05, RZ01, SK06, SZY16, TY04, WK19, YP20, ZC20, Zhe20, BM18c, GLT97, GHRT98, HSS93, JRW94, LS91, LT93]. **set-functions** [LS91]. **Set-Valued** [ACN15, GJ99, LP22, LN11b, PZ98, PZ00, PZ03, PW05]. **Sets** [ANT16, AH05, AVS19, AVS21, AZ08, BR19a, BM14, BMR00, BCS99, BM98b, BLY14, BCWW15, CH15, CGT10b, DW15a, DGR17, DP22, DW11, Din98, DR96, EZ10, FI08, FG04a, Fre03, GHHL05, GU22, GJR08, Gün14, GWZ15, HHI⁺20, HN09, HW07, JAL15, KT00, KS18, Las11, Lás17, Lew02, LN02, LN05b, LNP07, LN14b, Lim11, Lov11, MZH20, MHL15, MM05, NPS10, OR16, Pen17, RG22, RS11, Rut17, Sag16, Sch05, SYZ19, SGK21, Vel15, Vog08, VS10, ZN08, ZN11, ZW12a, Zhe23c, Zhe23b, ACC93, GK99, MS94b, ZT92]. **Several** [LH04, LBP20]. **SGD** [JNN21]. **Shadow** [GHW08]. **Shadows** [DPW15, SS15]. **Shah** [Wan95]. **Shannon** [BH95]. **Shape** [ABCdC23, BHKO02, BHK⁺09, Bla21, Bla23, CHP⁺09, DQQY02, GLRW21, Hab98, Lau00, Luc09, LSW20, RW12, SSW16]. **Shape-Preserving** [DQQY02]. **Shaped** [HOR99]. **Shapley** [BT20]. **Share** [GU22]. **Sharing** [AH19, GKPV01]. **Sharp** [CGT20, CL23, DY04, Dol20, FIS10, JL03, LMWY11, LMP⁺18, MZ98, WJ00, WyW04, ZY07, Zua03, MZ00]. **Sharpness** [Rd20]. **Sheet** [FGM12]. **Shifted** [GKR20, Mit94]. **Shifting** [YMT04]. **Short** [Bar08, GV94]. **Shortest** [DP00, Wen97, Ber91]. **Shrinkage** [KF18a]. **Shrinkage/Thresholding**

[KF18a]. **Shrinking** [GL14a]. **SIAM** [MZ00, QW01, ZT98]. **Side** [Gre00, PS11]. **Sided** [RW16, DFNS05]. **Sides** [GST11, HCH12, KRT07]. **Signal** [KB08, GK99]. **Signed** [INT15]. **Signomial** [CS16]. **Simple** [BV18a, BCU00, DFS03, HL08a, HL11, HR15, KT14, KLL22a, KLL22b, KR03, LT02, Pyt98, YN17, CH93b, Li96]. **Simplex** [ABGJ14, AWW09, AM00, Chu21a, CV07, GRS21, HJB20, IdW16, LRWW98, Loc15, McK98, RSE18, dKLS15]. **Simplicial** [Tse99, DvTY91]. **Simplicity** [DU21]. **Simplified** [GT97b, Roo15, Sch08, Sta04]. **Simulated** [CF99, Fie00, Nau02, Fox95]. **Simulation** [Din98, PGGH18, SFP11, GK95b]. **Simulation-Based** [PGGH18]. **Simultaneous** [DRT17, Gre00, Hol04, JL16]. **Single** [ASZ08, AGH10, AG14, BTC08, CKL97, CJK98, EI06, GRW20, SCRS00, dSTVB18]. **Single-Cone** [EI06]. **Single-Directional** [AGH10]. **Single-Objective** [ASZ08]. **Single-Sink** [SCRS00]. **Single-Valuedness** [AG14]. **Singly** [CPRZ20]. **Singular** [CCS10, CNQ97, IK00, IS02c, Lov11, SI13]. **Singularities** [CTW19]. **Singularity** [SWW21, iT17, LP93]. **Sink** [SCRS00, XLD99]. **Sinkhorn** [Car22, PV23]. **Size** [BHG07, FV07, FB19, Kum16, LS22, RSKW19, SM99, AH16, Bar93]. **Sized** [YMT04]. **Sized-Broyden** [YMT04]. **Sizes** [BHT16, BT19, PM15]. **Sizing** [Sta99, YMT04]. **Sketch** [PW17]. **Sketched** [YLG22]. **Sketching** [MKU21]. **Skew** [BAC11]. **Skipping** [KON98]. **Slater** [DLW99, LZH14, MRS16]. **Sliding** [LZ16, LV07]. **Slim** [DO06]. **Slope** [BHKM14]. **Sloppy** [RTM23]. **Slower** [XXS21]. **Slowly** [Cab05]. **Small** [EL10, ND09]. **Smooth** [AAGM22, AK21, AST10, AFGO20, BH19, BGR20, BGP09, BM98a, BM98b, BFMS14, CC19, CGT12, CNQ97, CH97, CW23, DN20, Fus14, Gar21, GDG22, GW19, IS02c, JR00, KLW18, KF18b, LPW23, LL20, LM21a, Lu09, LFN18, MS03, MOP20, Nem04, OLR21, POLW20, RS11, RW18, SP12, TN21, TZ10, TDFC18, WG19, Wen97, ZN14b, Zhu02, d'A08, dGJ18, dRT92]. **Smoothed** [AI11, MWDS18, VVM⁺09]. **smoother** [Bel94]. **Smoothing** [BT12, BR23b, BC14, BH14b, CX99, CC99, CY00, CWZ12, CB14, CNY14, CL14, CH15, DGN12, DBW12, FLT01, HYF05, JR10, KP99, KN02, KN04, KSX08, LL09, MPR10, NARS14, Qi99, QZ00, SSQ04, XYZ15, XLS19, ZC09, ZC20, ZPXQ21, dE14, LS93, MN93, PZ94]. **Smoothing-Type** [KN02, KN04]. **Smoothness** [CGT19, LTP23, LZ13, LLT22]. **SNOPT** [GMS02]. **Sobolev** [Tha93]. **Sofer** [CK99]. **Solution** [BBT06, BP12, BZ08, Chr20, DLR14, FK10, FGG07, GT97a, GLTP98, Gre00, HMW21, HKK11, HMP⁺08, HY16, IPRT00, JY04, JS16, KS16a, KQ19, KM21a, LW11a, Lin08, LNS18, LFJ⁺11, LPV05, MZH20, QZ08, RS11, Rob07, Rot09, RPK03, TM15, Tuy00, ZG03, ZSX19, ZL02, BCT93, DFKS11, GMR91, GLT97, Gow92, HSS93, MT91, MS94b, MP95]. **Solutions** [ADE⁺18, Att96, BTNR02, BS98, CG08, CLMP10a, CDL16, CY99, CW23, Ded00, EOL98, EMN22, GSG12, GJLVP14, GHGHL06, GL10, GJN06, GHNS19, IS10, KP98, KK05, KRT07, LPR00, LN14a, Liu20, LJ16, MSFL17, MZ98, Mat05, MOS14, NO09, PT18, RW07, Sag16, SS23, SFM14, SdM00, SW15, Vog08, WZZ22, WyW04, XS16, XLZH19, ZL12, ZK15, Dan93, MZ00, SM93, Tha93, Ver96, Wan95]. **Solvability** [Bie16, CLPT06, GS07, RW16, Zhe20]. **Solvability/Unsolvability** [CLPT06]. **Solvable** [PH23]. **Solve** [ABGJ14, LYSA20, WUR⁺23]. **Solver** [BCWW20, CF01, LMO06, uDR15, Toh03]. **Solver-Based** [LMO06]. **Solvers**

[FFG99, Hen15, LM19, MS11a]. **Solves** [CH16]. **Solving** [AINT17, ACN15, ACS14, AMS16, AGJJ00, BBN14, BD17, BTC08, BBTT12, BV18a, BT21, BYZ00, BLST19, BH14a, BAD18, BV06, BK10, CT06, CHS06, CPRZ20, CP01b, CWZ18, DENR20, FMW96, FS17, Fil99, GSU21, GO21, GLRT99, GACD14, HM15, HNKK17, HL17, HL20, IS02c, JFQS98, KV17, KRS11, KMM19, KM21b, Kor00, Lev04, LS97b, LST18b, LST18a, LT96, Lie20, LFJ⁺11, McB98, MZ99, PS21a, POLW20, PFA17, PW19, QQS03, SS17, SBD⁺11, SNTI16, SSN04, SDGM99, SKC12, SBT16, SL15, TA98, TK02, Toh03, Vil05, WST10, XYZ15, YL11, ZZST20, ZM96, vdLTY07, DMZ94, Fre95, Gar93, PY93, Qi95]. **Some** [AKS00, AHFH16, CK99, Chu21b, EW09, FIS10, FP98, Fus14, GS07, GO12, JL18, KH05, Kea11, LPT07, Loc15, LPR98, NY05, PH23, PR07a, Pow95, PW19, SZ98, Toh00, TK02, ZYP21, Zha98a, dKL10, CL96b, DHLN92, GK95b, Kan96, Mel96, ZC91, Zhu96]. **SOS** [AP14, ND09, WML21a, WML21b]. **SOS-Convexity** [AP14]. **Source** [BTC08, BLMH06]. **Sources** [XLD99]. **Space** [Alv04, ADL08, Bla23, BI98, Bur03, CCR17, DLW99, ES22, HXH22, HV05, HK06, HK09, KT03, LN05a, Luk08, MPTD21, RZ01, RW12, Sch08, TZ10, ZN11, KS91, Kup96]. **Spaces** [AZ19, Bac14, BD17, BP07, BDMS09, BCCL22, BKMW20, BK21b, BU22, BCGH08, CCFP05, CT03, Den97, DP23, DFR07, DS12, FLY11, FI08, FBH22, GP19a, GW21, GLRW21, GYZ14, GXZ21, GNRPT16, HS06, HHP18, HSK15, Hu07, JJ15, KKS19, KS19, KRS11, KFGT21, KK02, KT08, KNT10, KTSB21, LPT07, LLAN22, LN02, LJ02, LN03, LN05b, LNP07, LFLL09, LN14b, LN18, LMP⁺18, LNYZ21, MM11, MM21, NZ01, NT08, RW16, Rut17, Sab11, Ulb03, WyW04, Zas10, ZN04, ZN05, ZN07a, ZN07b, ZN08, ZN09, ZN10, ZN14b, Zhu02, HK92, Iof94, IK96, NT02, Sha94, Tha93]. **Spanning** [RO18]. **Sparse** [BYZ00, BH03, Bou97, BSR17, CMYZ22, CP18, DDW20, DKLM22, DV23, ET19, EMN22, KKW05, LW11a, LBT22, LLST19, Lu09, LZ14, MSFL17, ND09, TY11, XZ14a, XD20, YCST22, ZL12, Zha20, vdBF11, Fle95, YG91]. **Sparsely** [AAJN16]. **Sparsest** [ZK15]. **Sparsification** [Erg19, ZSY10]. **Sparsified** [AP23]. **Sparsity** [APX17, ACHW21, BE14, BH18, CSPW11, CDR22, HZ16, KKW09, Las06a, SSSZ10, SM18, VZQD17, WKKM06, WML21a, WML21b, XFLP21, FKMN00]. **Sparsity-Inducing** [CDR22]. **SpaseLoc** [CJSY07]. **Special** [DKM18, DR07, LM02, Wu96]. **Specialized** [Cas00]. **Specific** [PTZ05, Sat22]. **Specified** [Fil99, Fre95]. **Spectrahedra** [BRS15, BKL19, GN11, KTT14, KTT15, dCST15]. **Spectrahedral** [Kum16, OC23, SS15]. **Spectral** [ANP08, BMR00, CWW18, CPRZ20, CDZ17, DSST20, DG23b, Erg19, GHR14, HR00, LT20, NRS21, VVM⁺09, WX20b]. **Spectrally** [See97]. **Spectrum** [DK10, WX20b]. **Sphere** [BQX15, BBW18, FHPS22, GH15, Hag01, HHJL23, Las22, SZY16, WX19]. **Spheres** [LNQY10, ZCTW12, Mar94]. **Spherical** [Sor97]. **Spline** [DQQY02]. **Split** [BCDJ21, BAR21, DGR17, HAN11, XC21, BAR21]. **Split-ADMM** [BAR21]. **Split-Douglas** [BAR21]. **Splitting** [ACP11a, ACP11b, BSW23, BFO19, BCH14, BAC11, CR97, DP19, Dav15b, Dav15a, Gis21, GM12b, HLWY14, JE19, LP15b, LR21b, LMV23, MT20, MS11c, O'D21, Pan19, RFNP14, RTBG20, Sal17, TP20, Val20, ZY14, Li93a, LT92, Man91]. **Spurious** [EH20, JL23, LYP23]. **SQAP** [JK00]. **SQAP-Polytope** [JK00]. **SQCQP**

[AP21]. **SQP** [AKR23, BTZ92, BCN08, BCN10, DJV06, FLT02, FGL⁺02, FLRS06, FV16, GMS02, GR14, GR10a, GR10b, GLR15, GHS95, HV01, HR14a, HH06, IK96, IS10, JR00, Kup96, LZ03, QW00, QW01, SD00, SO21, Wri02, XB99, XYZ15, ZT96, ZT98, ZU11, Zie14]. **SQP-Filter** [FGL⁺02]. **SQP-Methods** [Zie14, IK96]. **SQP-Semismooth** [HH06]. **SQP-Type** [DJV06]. **Square** [AK21, MC05]. **Square-Root** [AK21]. **Squared** [SSQ04]. **Squares** [BR23a, BBT06, Bec15, Ber96, Ber97, BDMS09, BCWW15, CGT14, CBF023, CP17, DP22, DLR16, EZ10, FSP15, FRW11, GLT04, GLN07, GSW97, KV17, KKW05, KS15, Las05, Las06b, LV22, LYP23, MEV23, Mas20, PA14, PY19, RV06, RM08, Sch06, Slo22, STY16, VS08, WKKM06, XZ14a, ZCD00, ZCS10, ZC10, vdBF11, Hei93, Hus94, KSW94, YY95]. **Stability** [AHO98, AW94, AAZ15, AK21, AH16, AD15, BCL07, BS98, CPS07, CLPT99, CLMP10a, CM17, CJ18, CHN18, CS15, DR00, DHR07, DR14, DGL10, DL13, GM15, GM17, GLT97, GLdS05, GTdS06, GLY12, Har09, HRS06, HMN10, Her09, JY04, JRS10, KK05, KNT10, Küc08b, LV22, LTY12, LPR00, Lev02, LZ13, LXL11, LRX14, Mal07, Mat05, MO07b, MR12, MRS14, MN14, MOS14, MOR15, MN16, MPA21, NT08, NKT10, PVZ07a, PR98, RW07, Roy20, VVM⁺09, ZXZ16, ZN15, dP02, AW93, JRW94, RS96]. **Stabilization** [LRR98]. **Stabilized** [GR14]. **Stable** [BGM19, Dah99, FLY11, GLRS15, GR03, GJR08, GER23, IK16, JR10, LFLL09, MS21, SKC12, YZZ17, ZN15, ZZN18]. **Stage** [BHM18a, BHM18b, BJS07, CSS19, CLYZ22, DR00, DMM22, FWKS15, GB22, KGM23, LXL11, LS20, LCPS20, MÖ07a, MÖ09, MÖ10, OSS11, PS21a, RSvdVH16, SL15, XY10, YK18, ZK14, ZSX19, CM11]. **Stagnation** [Kel99]. **Staircase** [Ent96]. **Standard** [BMP22, KNP98, LSS19]. **Standpoint** [LR21b]. **Start** [YW02, Fre95]. **starting** [BF96]. **Starts** [JKW15]. **State** [BCL07, BDM16, BM16b, BLMH06, CdlRT08, GW21, Ger08, Ger11, Her09, HK10, HSW14, KU15, Mal07, PZ03, RT06, Sch09, SW11, Trö05]. **State-Constrained** [BCL07]. **States** [HN19]. **Static** [HMW13]. **Stationarity** [APX17, Bet19, HMW21, HMW13, HK09, KLT07, NR20, Wac14]. **Stationary** [AA06, ALSV18, BH20, FT02, FT07, Gün14, GER23, HPU19, HL23b, HLP23, JBK⁺18, JR10, KK05, LBP20, Mat05, PT18, vdLTY06, DvTY91, HSS93, Sch92, TDZ20]. **Statistical** [CCF⁺20, CPS18, HZZC22, HS19, JHR23, LV08]. **Statistics** [SM99]. **Steady** [BLMH06]. **Steady-State** [BLMH06]. **Steepest** [CT13, CGT10a, CC02, Fle98, Mur03, Zhu95]. **Steepest-Edge** [Fle98]. **Steiner** [BM02, CBJF97, FdOF07]. **Steklov** [Bla21, SSW16]. **Step** [AFFG14, AH16, BHG07, BRZ20, CD19, CVV99, DIMS18, EGG09, EG10, FB19, GLR14, MT03, PS97, Roo06, Roo15, SZ98, Ans96, Gon91b, Gon91a, GT92, Kiw96, KKM93, TM95, Wri95, dRV92, dRT92]. **Step-size** [AH16]. **Stepping** [CW14, GAP08, TP02]. **Steps** [BB23, PRS16, GV94]. **Stepsize** [Tse98, dEH01, Mas97]. **Stepsizes** [LM21b]. **Sterilization** [KS00]. **Stiefel** [CMSZ20, GSAS21, LCD⁺21, XLxY21]. **Stochastic** [AFH⁺13, AFC22, AABL21, AP18, AD19, BGN22, BHM18b, BB21, BPL12, BCRZ21, BGR20, Bia16, BZ08, BCCL22, BHT16, BT19, BCD⁺18a, BBN18, BJS07, BB23, BCD20, BCNN11, BHNS16, CCL09, CERS18, Che01, CM11, CWZ12, CSW15, CSS19, CS22, CLYZ22, CDL14, CCT21, CS15, CKS17, CP15, CHP⁺09, DL15, DG19, DD19, Den14, DR00, DR03, DHR07, DR14, DW15b, Din98, DBW12, DR18, DM20, DMM22, ER05, ES22,

EN14, EB20, FWKS15, FCF07, GS21, GB22, GH16, GP19a, GW21, GLRW21, GL12, GL14a, GL14b, GRW20, GSG12, GNS08, GHZ99, GDG22, Gri19, GR12, Gui16, GKS18, Gui20, GMS21, HNO15, HN19, HSS17, HKMS20, HP18, HRS06, HS19, dM08, dMM10, HWWY23, HCH20, HZ22, IJOT17, IJOT19, JBS⁺23, JS16, JZZ20, JS20, KP22].

Stochastic [KPZ19, KM21a, KSdM01, KLL22a, KLL22b, Küc08b, LY98, LZ18, LY19, LOZ23, LCC⁺20, LJ20, LS22, LZCW23, LZ03, LXL11, LRX14, LW15, LZ20, LCPS20, Lu14, LW08, Lue08, MP16, MP19, MPP⁺17, MÖ07a, MÖ09, MÖ10, MLC22, MX06, MXC⁺19, MP07, MS06b, NL14, NJLS09, OR02, OSS11, PS20, PS21a, Pat16, PAV21, Pfl10, PP12, PP16, RP23, RCGR18, RNV09, RS11, RW07, Rot09, RW17, RR08, SÖ17, SKM19, Sch96, ST03, Sch98, SZ14, SB18, SdM00, SA04, Sha17, SD20b, SHP18, SY18, SL15, SXMW13, THDL22, WB16, WMGL17, WD23, WZZ18, XZ14b, Xu06, XY10, XY15, Xu20, YWF19, YK18, Yin99, YLZ02, YKI04, YNS20, ZC09, ZK14, ZAL21, ZX21, ZMB⁺20, dE14, And96b, AW94, BMR94, BQ95, CJ18, DJ93, Den00, JYZ94, RS94, RS96].

Stochastically [CSW12]. **Stock** [YLZ02]. **Stokes** [HH06]. **Stop** [Pat16]. **Stopping** [BPL12, Har98]. **Storage** [BK21a, DYC⁺21, Kau99]. **Strategies** [AAGM22, BBN18, CGRV21a, CC19, GHHL05, Hyn23, MCL10, NWW09, NRS21, PMDL10, YW02, LN93]. **Strategy** [BHHK00, HIK03, KR02, Pan16, Sag16]. **Stratifiable** [BDLS07, FMP18]. **Strength** [AWW09]. **Strict** [CM10, DDD22, KN05, KFF09, dCST19, ST09]. **Strictly** [Gre00, HLWY14, HR15, LS97b, SK98]. **Strips** [ET07]. **Strong** [AAS17, AZ09, BE06, Bet19, BL94, CS08b, CHNT21, CRRW21, DY99, DLW99, DP23, DR96, DL13, ET07, FBM13, GH16, HMW13, HK09, JL10, KT03, KS14, KK05, KRZ17, LTP23, LJ02, LN03, LN05b, LNP07, LDLS20, MP97, Mat05, MDV12, NT06, PW16, RTW97, RK19, Rev97, SW14, TWB⁺03, Wac14]. **Strong-** [MP97]. **Stronger** [MSG20]. **Strongly** [AAGM22, AFGO20, BSW23, FS17, GL12, GL14a, GER23, HHI⁺20, IPRT00, JR10, LPW23, LMV23, LB00, PH23, PW16, RC22, Sch16, ADR22]. **Structural** [AK08, CSW15, LM16]. **Structure** [BIM23, DSS09, DF19, DJS13, GSG12, Gor22, GNL11, LT21, MS00, NT19, SW15, SL14, SAV14, CL92, Hen95, HSS93, Hus94, RHW93]. **Structure-Adapted** [NT19]. **structure-exploiting** [CL92]. **Structured** [BBN14, BCN19, CV17a, Com14, CGST96b, CVV99, CR21, GKPV01, KSW94, LZ19, MS03, NS17, PCA19, SAZ22, WKKM06, WLM22, XFLP21, YCST22, ZC10, JYZ94]. **Structures** [ABT00, CM16]. **Studies** [FGM12]. **Study** [BER04, CCLW14, FWKS15, Pul97, Bon97, KBS93, NN91a]. **Sub** [DG23b]. **Subadditive** [KM19]. **Subanalytic** [BDL07]. **Subcubic** [HL11]. **Subdeterminants** [Del19]. **subdifferentiable** [MLRR93]. **Subdifferential** [BQ95, CD00, CHNT21, CHL16, CHLC19, DHML01, DF19, DL13, EL09, HLZ08, HJ02, LN11a, MR12, PA19, TZ10, WG19]. **Subdifferentials** [AXY23, CT13, CHY10, KM09, LT20, MO01, MN13, ZN15, BD02]. **Subgradient** [Bac15, BWWX15, BDL07, BLP23, BBR16, BCGH08, CHN18, CHNT21, Cru14, DD20, DG19, Gri18, Gri19, JRJ10, Kiw04, Kiw06, Kiw08, KNX16, LCD⁺21, NB01, NO09, NL14, NS14, RNV09, SY13, WLWY15, YP20, dF09, Ren16]. **Subgradient-Based** [YP20]. **Subgradient-Type** [LCD⁺21]. **Subgradients** [BDLS07, ND10, QW20]. **Subgraph** [RK19]. **Subgraphs** [CC18]. **Subject** [BM20a, BCU00, BMW10, CCL09, CL96b, CPRZ20, DK10, Ete22, HH06, HK10,

Mal07, Sha97, Sor97, CL96a]. **Subjects** [BDS10]. **Sublevel** [AH05, AVS21]. **Sublinear** [ES22, GY20, GIJT96]. **Submatrices** [DV14]. **Submodular** [HKMS20]. **Suboptimal** [GSG12, TP16]. **Subproblem** [AINT17, AZ09, Ans17, BV18a, CJSY07, CY99, CH16, CW23, For05, GLRT99, HNKK17, JW21, JL19, RSS00, SY19, TA98, WX20a, WLKK23, YB16, MP95]. **Subproblems** [BA13, BCWW15, IS10, JL20, LST18b, Ni05, SW95]. **Subregularity** [BYZ19, CHNT21, Gfr11, Gfr13, LM12, WLN23, ZN07b, ZN10, ZN14a, ZZ16, ZN21]. **Subset** [BZ04, CKP00, DDW20]. **Subsets** [BTMN01]. **Subsmooth** [ZN08, ZN09, ZW12b]. **Subspace** [ABCFR20, CDR22, EG10, FH14, ML05, RFNP14]. **Subspace-Based** [ML05]. **Subspaces** [BM16a, BSW23]. **Substitution** [HTY12]. **Subsystem** [Pfe08, YP20]. **Successive** [ACS14, BZ08, BGNW05, KT00, MGGS09, RHL14, TF96]. **Sufficiency** [BCT19, KMP23]. **Sufficient** [AZ09, BYZ19, CT02, CdIRT08, CM20, CM22, CLPA21, EW09, FS12, HS06, HN09, Kel99, LP06b, MM11, NYF11, PS10b, Pot14, RT06, WX20a, WY01, Zas05, War92]. **Sum** [BR23a, BH14a, BDL23, CKP00, CFBG23, CP17, CHL16, DP19, DP22, EZ10, FSP15, HBM21, LY19, Las05, Las06b, LTAP22, LV22, LYP23, MEV23, Mas20, PA14, PY19, QZ00, RV06, Slo22, TSP18, WX19, WZZ22, XKK22, XY97, XY00, And96a]. **Sum-of-Ratios** [BDL23]. **Sum-of-Squares** [BR23a, CFBG23, DP22, FSP15, LV22, PA14, PY19, RV06, Slo22]. **Summations** [ND09]. **Sums** [BCH14, KKW05, KS15, LV19, Sch06, VS08, WKKM06]. **SUMT** [Ans96]. **Superlinear** [ATP21, CC99, CK00, DJV06, FIS10, GOST01, LSZ98, McS96, MER18, NT16, RN21, Sim11, YF00, EM91, KS91, MW96, ZTD92, ZTP93]. **Superlinearly** [Ani02, CH15, FQ96, IS02c, LST20, McS94, PS98, PS10b, QQ00, ZL03, ZCT10, CH93b, ZT93]. **supply** [RSE18]. **Support** [ADE⁺18, BRB19, BH15, FM03, GLHZ11, MÖ10, Men17, ZAL21]. **Supporting** [Pan16]. **Supremum** [CHL16, CHLC19, HLZ08, LN11a, MN13, PA19, PAV21]. **Supremum-Sum** [CHL16]. **Sure** [GW21]. **Surface** [DD98, dMM10, MP14a]. **Surpassing** [MGR18]. **Surrogate** [KL97, RR15]. **Surrogation** [SSD22]. **Survey** [HL23a, Luc09]. **Sweeping** [CP15]. **Switching** [YKI04]. **Symmetric** [BH18, BKS96, CQT03, CHLZ17, CY10, Dan21, Don14, EH20, GS07, GVJS10, HL02, JH14, JS11, KSH97, KSX08, Lim11, LWZ15, LY07, Lu14, LSZ98, Per23, Ran06, RFNP14, SW14, SS22, Van95, Yos07, KBS93, Li93a, Man91]. **Symmetric-Matrix-Valued** [CQT03]. **Symmetries** [BDPX09, DL17]. **Symmetrized** [XXS21]. **Symmetry** [MNR⁺22]. **Symplectic** [GSAS21]. **Synchronization** [Bou16, LXB19, Lin22, LYS17, ZB18]. **System** [AL21, AF22, Bet19, BPC11, BRU97, CT06, HMW21, HH06, HY16, LN05a, LN05b, LNP07, Peñ00a, vAPA19, KSW94]. **Systematic** [MTB23]. **Systems** [AGH10, AC02, BDdSM15, BGY⁺23, BDL07, BCD18b, CCP22, CPS07, CLMP10a, CCH05, CCP08, Com14, CP01b, DKL21, Ded00, Den97, DEAW99, EF02, Fay02, FG04a, FP97, FGG07, FG04b, GM17, GM19, GJ17, GST11, HMN10, Iid13, JY04, JLL09, JRJ10, Kan14, KRS11, KNT10, LW11a, LNS00, LN02, LNP08, LN14a, LN14b, LN18, LNYZ21, MN16, MS19, NY02, NKT10, Nga15, PR20, QQS03, She14, Son06, Toh03, TP02, YY23, YM14, ZL12, ZK15, ZN05, ZW12b, Zua03, ZM06, AW93, DMZ94, GLT97, LL94, YG91]. **Tableau** [AWW09]. **Tail** [CCH05, JBS⁺23]. **Taking** [TP16]. **Tam** [BSW23]. **Tame**

[FKP10, Iof09]. **Tamed** [ES22]. **Tangencies** [Pha20]. **Tangency** [VS08]. **Tangent** [BCS99, CYZZ19, Pen17]. **Tangential** [CGT10b]. **Tangents** [RT19]. **Tapia** [CY99, CL23, YWAS17]. **Target** [LLD⁺02]. **Task** [PTJY10]. **Taylor** [Lüc95]. **Team** [GSG12]. **Technique** [BR23b, BKR17, CB14, DSS09, DGN12, DO19b, GG08, HR12, MC05, NARS14, Nes05, WHY⁺19, YCST22, ZH04]. **Techniques** [BBR16, FdOF07, FV16, KS12, LRR98, LSW20, MP14b, RK19, Kiw96]. **Temperature** [CF99, Fie00]. **Temporal** [XA18b]. **Tensor** [Bou97, BV18b, Don14, FS96, FP97, GN20, HHJL23, JLZ20, SC91, SVD14, ULC20, YFHS16]. **Tensor-GMRES** [FP97]. **Tensors** [CHLZ17, NYZ18]. **Tentacles** [Sch06]. **Term** [Cab05, NYF11, Tse98, WML21a, WML21b]. **Terminal** [BM18a]. **terminates** [O’L95]. **Terminating** [AKS00]. **Termination** [HDL21, WLLY16]. **Terms** [Dol20, LST16, MSG20, SVD14]. **Test** [CM21, SL21]. **Testing** [GKS18, WG19]. **th** [CJ18]. **Their** [BS15, BHR19, CRZ18, CM16, GTdS06, IK14, Kal18, Kan14, MO01, MN13, RW12, dCST15, ZSX19, ACS14, JSC95, MEV23, TM15, XS16]. **Them** [FFG99]. **Theorem** [AHFH16, BHKM14, DGLM14, Don12, FS17, GKS18, GL18, Kas10, KKT15, KQ19, KB08, LBH22, MP97, MST11, NT06, ZN11]. **Theorems** [AAZ15, AK21, BCD⁺19, DST23, Dax09, Fay06, FB00, FKP10, JLL09, Och19, SN07, Zol03]. **Theoretical** [LS97a, KBS93]. **Theoretically** [JNN21]. **Theories** [DR13]. **Theory** [BGLW08, BP05, BCT19, CD00, CT02, CT12, DV97, DEAM97, DO19b, EA99, GLRS15, HSK15, IS02b, JRS09, KS19, MA00, RW17, Wat00, YmZS15, ACC93, BS94, GLT97, Kup96, MS00, Ren95]. **Théra** [ABW21]. **Therapy** [Gor22, RADK05]. **Theta** [GPT10, dCST15]. **Third** [GN23]. **Third-Order** [GN23]. **Threading** [GLM98]. **Three** [BHK⁺09, BGR20, NYF11]. **Three-Dimensional** [BHK⁺09]. **Three-Term** [NYF11]. **Thresholding** [CCS10, CP08, KF18a, Zha20]. **Tight** [BHM18b, CCT21, GY20, RTBG20, TP20]. **Tighter** [Lau01]. **Tightness** [LLZZ19, WZZ22]. **Tikhonov** [AL21, BBT06]. **Tilt** [BGM19, CHN18, DL13, GM15, LZ13, MR12, MS21, PR98, ZN15, ZZN18]. **Tilt-Stable** [BGM19, MS21]. **Time** [AP22, ACR19, AH19, BBLZ17, BRB19, CW14, Chu16, Den14, Ete22, GAP08, Góm21, HG16, HOR99, IT18, JL20, KS05a, MTB23, NOS17, NT16, Pan19, PW17, PS10b, Pul97, SOT09, SL21, TP02, WX19, BTN94, DL91, Ral96]. **Time-Consistent** [Den14]. **Time-Delays** [Pul97]. **Time-Stepping** [CW14, GAP08, TP02]. **Time-Varying** [AH19, NOS17, Pan19]. **Times** [CJK98, KS05a, XXS21]. **Timescale** [GRW20, HWY23]. **TOA** [RM08]. **Todd** [GT97a, GT97b, KT14, TTT98]. **Tolerance** [Pen19]. **Tolerant** [CF01, MIM20, SXBN22]. **Tomography** [BTMN01, JS00]. **Tool** [SBD⁺11]. **Topology** [AK08, BTN97, HHI⁺20, LOZ23, BTB93, BTN94]. **Torricelli** [NARS14]. **Torus** [GH15]. **Total** [BBT06, FLY11, LFLL09, RBDM22]. **Totally** [RvdVH15]. **Trace** [Gar21, MMBS14, PTJY10, WZZ22, CW23]. **Trace-Norm** [Gar21]. **Trace-Sum** [WZZ22]. **Tracking** [LLD⁺02, MMN⁺22, RR15, SSD22, IKR⁺91, PR93]. **Tractable** [BTN02]. **Trading** [RS15, SSSZ10]. **Traffic** [FHKM06]. **Training** [CHP20, GKT23, LLC22]. **Trajectories** [Cha02, GS98, Tüt03, Yos07]. **Trajectory** [NF01]. **Transfer** [GHGHL06, ZT92]. **Transference** [ACHW21]. **transformate** [See92]. **Transformation** [Fuk98, MPSU19, RT05, Wu96, RD95].

Transformations [BM07, ULC20].
Transforms [RV06]. **Transit** [KS05a].
Transitive [MS02]. **Transport**
 [BBLZ17, BK21a, Car23, HPU19, MRT15,
 SKM19, TSAKN23]. **Transportation**
 [BPS06, DO06, HH96b, Zen91, ZC91].
Transposition [SN07]. **Transshipment**
 [Fle01]. **Traveling** [BM02, GW18, HP94,
 JSV91, dKPS09a, dKPS09b]. **travelling**
 [BCQW95]. **Treatment** [FLS03, RADK05].
Tree
 [CBJF97, FdOF07, MP07, PP16, RO18].
Treespace [SPM18]. **Tresca** [ABCdC23].
Triangle [HAN11]. **Triangular** [DMZ94].
triangulation [Dan93]. **tridiagonal**
 [DEG⁺91]. **Trigonometric** [BR23a]. **Triple**
 [Iid12]. **Triple-Hierarchical** [Iid12]. **Truly**
 [SS00]. **Truncated**
 [FLP02, IS10, LRR98, NLQT06, STKI17,
 VS08, XS99, Dix91, NN91a, ZNB⁺93].
Truncated-Newton [XS99, NN91a]. **Truss**
 [BTN97, JKZ98, BTB93, BTN94]. **Trust**
 [AINT17, Ans17, ANP08, ABO22, BSV14,
 BV18a, BP97, BV18b, BA13, BKS96,
 CNY14, CDM20, CGST96b, CSV09, CRS18,
 CRRW21, DO19a, DV97, DEAM97,
 DEAW99, EA99, EGG09, EG10, FGL⁺02,
 For05, GJV16, GLRT99, GST05, GST08,
 HV01, HR14a, HNKK17, HM02, JW21,
 JFQS98, JL19, JL20, Kau99, KS99, KPZ19,
 LMT09, LM02, LLRV19, LY07, MWDS18,
 Mon23, Ni05, NR20, Qi95, QQS03, RSS00,
 hRK14, SHP18, SY19, TA98, TE19, Tse02,
 Ulb01, WD05, Wal08, WX20a, WLKK23,
 WS11, WT04, YB16, ZA14, ZSL17, Bur92,
 CL96a, CGST93, EA95, Sar95, SW95].
Trust-Region [AINT17, ABO22, BSV14,
 BA13, CDM20, CSV09, CRRW21, DO19a,
 DEAW99, EA99, EG10, FGL⁺02, For05,
 GJV16, GLRT99, GST08, HV01, HR14a,
 HNKK17, HM02, JW21, LMT09, LLRV19,
 LY07, MWDS18, Ni05, RSS00, hRK14,
 SHP18, SY19, TA98, TE19, Tse02, Ulb01,
 WD05, Wal08, WLKK23, WT04, ZA14,
 ZSL17, EGG09, EA95].
Trust-Region-Based [DV97, DEAM97].
Tseng [MS11c]. **TSP** [Che05]. **TSSOS**
 [WML21a, WML21b]. **Tubularity** [Cha02].
Tucker [ACS14, HSS93, KT18, Pan94,
 QQS03, VR05]. **tuning** [Ser95]. **Turing**
 [dKV16]. **Twice** [AB18, MS20]. **Two**
 [AHLN16, AHSS12, Ans17, BHM18a,
 BHM18b, BGV20, BM16a, BE06, BJS07,
 BMZ01, CM11, CSS19, CLYZ22, CM21,
 CVV99, DP19, DMZ12, DR00, DMM22,
 FWKS15, GB22, HAN11, HM15, HWWY23,
 HDL21, Kum16, KGM23, LPW12, LH02,
 LX23, LXL11, LS20, LCPS20, Mar05,
 MÖ07a, MÖ09, MÖ10, Mia96, MSG20,
 OSS11, PS21a, PY97, RSvdVH16, SNTI16,
 SDGM99, SL15, SLWX23, TSP18, XXS21,
 XY10, YB16, YK18, Yil08, ZK14, ZSX19,
 dSTVB18, BT94b, DFNS05, Gur94, HSS93].
Two-Dimensional
 [AHLN16, BGV20, MSG20]. **Two-Level**
 [DMZ12]. **Two-Parameter** [SNTI16].
Two-Phase [dSTVB18]. **two-piece** [Gur94].
Two-Player [HM15]. **Two-Row** [HAN11].
two-sided [DFNS05]. **Two-Stage**
 [BHM18a, BHM18b, BJS07, CSS19, CLYZ22,
 DR00, DMM22, FWKS15, GB22, KGM23,
 LXL11, LS20, LCPS20, MÖ07a, MÖ09,
 MÖ10, OSS11, PS21a, RSvdVH16, SL15,
 XY10, YK18, ZK14, ZSX19, CM11].
Two-Step [CVV99]. **Two-Timescale**
 [HWWY23]. **Two-Trust-Region**
 [Ans17, YB16]. **Two-Variable** [YB16].
Type [AMS16, BT14, BK21b, BW05,
 BH14a, BKS16, DJV06, DMVV17, DPS17,
 GXZ21, HAN11, HM16, HR14b, IS02a, IS04,
 KT03, KN02, KN04, KN05, KT08, LSS14,
 LCD⁺21, MSQ98, NLQT06, Pen00b,
 QGD18, SPT08, SSW16, SS00, STY15,
 ULC20, dKHL17, HH06, LFP17, PW07,
 Bla21, CHLC19, ZOB20]. **Type-I** [ZOB20].
unary [GW93]. **Unbiased** [CGO22].
Unblocking [GG08]. **-Porous** [RZ01].

Unbounded [GW18, WUR⁺23, WLM22, ACC93, DvTY91]. **Uncapacitated** [BGV20, RSE18, RV93]. **Uncertain** [BTNR02, BTN02, BRU97, CG08, EOL98, dMM10, RP12, XS16]. **Uncertainty** [AP18, AZ08, BTN02, BG22, CR23, CSY23, Chu20, CHP⁺09, GJLVP14, HTT⁺15, NS18, ZSX19]. **Unconstrained** [Aus10, BGR20, BM17, BB19, Bou97, CGT10a, CP01a, DHP16, Fuk98, GPR02, GL01, GL03, GST05, HXLT23, JL05, LW11a, LF01, LFW98, LRR98, LS02, NYF11, Pap16, PC03, Ray97, ST10, Sch16, SXBN22, SVD12, SW99, Xu22, ZX99, ZH04, DEG⁺91, Iof94, NS91, Ral96, Sch92, SC91]. **Underdetermined** [LW11a, ZL12]. **Underlying** [SL14]. **Underrelaxed** [CH02]. **Understanding** [CCF⁺20, Peñ00a, ZHE23a]. **Unification** [BBW17]. **Unified** [ASSS23, Aus99, BT12, BCWP21, DO19b, DMVV17, GLR14, GJN06, HS23, JLZ20, LR10, ND10, Pat98, PFA17, RHL14, SJM21, SBFA17, ZN11, BT96, TYF96]. **Uniform** [DL13, LMV23, MOT04, RvdVH15, RSvdVH16]. **Uniformly** [Tha93]. **Unifying** [BY11, HLZ08, MS02, Och19]. **Unilaterally** [SV07]. **Unimodular** [RvdVH15]. **Uniqueness** [Cel07, GS07, HF14, INT17, Sha97, SSK98]. **Unit** [Las22, LNQY10, Loc15, MC05, WX19, ZCTW12]. **Unitary** [ULC20]. **Univariate** [LYP23, LS13]. **Universal** [CGT19, FG04a, Gül97, Gün14, Vog08, ZSY10]. **Unknown** [ABK22, VIT22]. **Unknowns** [CHS06]. **Unscaled** [BGM⁺16]. **Unsolvability** [CLPT06]. **Update** [BER03, KON98, NWW09, WD05, XB99, Xu18, YMT04, Dun93, Fle95, GW93, Gur94, KBS93]. **Updates** [AZ05, BCWW20, YMT04, BT94b, DEG⁺91, WZ95]. **Updating** [BDdSM15, MN00, YPC18, ZNW99, Bos93]. **Upper** [CPRZ20, Jan04, NMU18, WP23, dKHL17, vAS14, vAF18, GLT97]. **Upper-** [WP23]. **Use** [BM17, BK10, BCNN11, IY09, Hus94]. **Used** [AAJN16, MOT04]. **User** [ANRV04, Fre95]. **User-Provided** [ANRV04]. **user-specified** [Fre95]. **Uses** [HY96, Luo97]. **Using** [ACN15, Ani05b, ALSV18, AO06, Bar96, BV18a, BH03, BLG13, BGM⁺16, BPR20, BDPP14, CKS15, CNQ97, CGST96b, CV07, DYC⁺21, GJV16, GM12a, GACD14, HPU19, Kel99, KM21a, KSS99, KS16b, LRO05, LP15a, LCD⁺21, LSW20, MWDS18, MP14b, MSG20, MW06, RADK05, Sch06, Sim11, VS08, ZFL06, dEH01, CC18, CT93, CGST93, DEG⁺91, GLRT99, GNL11, KW10, MSFL17, Mit94, MP95, Pap17, SC91, SFP11, vAF18]. **Utility** [CH09, DR13]. **Uzawa** [HZ06b]. **Validated** [KH05, Kea11]. **Value** [ABF14, ACL99, CCS10, CG17, DG20, DMZ12, FBH22, GCPT18, GVJ06, GLYZ14, HG16, KS16b, OF03, SI13, YZ10, MS94b]. **Value-At-Risk** [KS16b, HG16]. **Valued** [ACN15, BP07, CQT03, GJ99, LP22, LN11b, MS20, PZ98, PZ00, PZ03, PW05, GTdS06]. **Valuedness** [AG14]. **values** [MTT94]. **Vanishing** [AL21, Cab05, Wan17]. **Vapnik** [LL22]. **Variable** [AD00, BLPP16, Dav91, Fuk98, KKS03, LS22, LMH19, LPS05, Och19, PLS08, RW21, Sal17, Sol98, YB16, Dix91, FM94a]. **Variable-Basis** [KKS03]. **Variables** [AB08, ALT19, CKP12, CL96b, FFK00, JM18, LMZ15, PH23, PNA10, Pyt98, SVD12, dSTVB18]. **Variance** [IJOT17, IJOT19, PRRL97, SKM19, XZ14b, XKK22, ZX21]. **Variance-Based** [IJOT19]. **Variant** [GH16, KT14, LM21b, MT03, YT22]. **Variants** [BRB19, EL10, GL18, HNKK17, IPS03, MS11c, XS16]. **Variation** [RBDM22]. **Variational** [AB18, ABCdC23, AM00, ABF14, AZ19, ACP11a, ACP11b, AT00, AGH10, AVS19, BP07, BGY⁺23, Bet19, BL22, BI98, BD10, BGH19, CLMP10a, CLMP10b, Ceg15, CWZ12, CW14, CMY15,

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