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Title word cross-reference

(1 + 1) [SP18a]. (2 + 1)D [HP14]. $(MC)^3$ [KSW15]. 0 0 0 1 [Dan19]. 0 0 0 $\bar{1}$ [Dan19]. 1 [CC14, Gio14a, HTT13, HTT14, MGL13, PM16, RKVL14, SBH+14, WNYP17]. 1 + 1 [Fan19, SÓÓN11]. 1/2 [HvWT17]. 1/t [AM17]. 2 [APC+14, BBB17b, BVP10, DLM18, EW14a, FJK+17, FK12, GCVA14b, Gwi12, Ixa10, JCL+18, KO14b, KO16, RAV11, SW14a, SW14b, SA15b, SKK11, SW11, TMA+15, TY10, TKL+12, TPC16, VLM11, WMRR17, WRMR19, YLKN17, YTYA17, ZSW+17a]. 3 [AV13, AM19, AGMS15, BAR12b, CP15a, CPCDdM18, CdLOL19, DGG13, FLZ+18, FRFH10, GS15, Gai17, GMF+17, Giu19, GG16, GX15, HKJ+12, HDM+12, JEC+12, JCL+18, JKIS16, KAK12, KL11, KO14b, KO16, KMJS16, LHJZ10, LHC+13, LX14, LKW11, LBP15, MGO13, MCP+11, NHD16, NCB18, PR10, PCGM14, QSC14, Qia17, RF15, RS12, RJLL16, RHBH15a, RHBH15b, TGH+16, TIM+16, VMGP+19, WNYP17, WRBL19, YKK+19, ZXL16, ZZD+16, ZSW+17a, ZFR18]. 3 + 1 [KHB14]. 4 [GGF+13, dSLF13]. 5

[GAB+16]. 6 [YKK+19]. 71 [JTH14]. − [KH11]. 1 [LM16]. ^{125I} [RMS+12]. 2 [BG13b, BG14a, BLG14, Bon15, Bon16, GBD10, HFSK12, RPB+15]. 3 [CDTV10]. $^3\Sigma$ [Faw10]. $^(R)$ [LNSD15]. ^{TM} [RJKC16]. Web tools [LSJ13]. $_{1-w}$ [TMA+15]. $_{11-x}$ [LQZ+13]. $_2$ [CJH11, CHW+15, DSM+11, LS11]. $_{20}$ [CHW+15]. $_{21}$ [CHW+15]. $_3$ [BKA+14, CJH11, CHW+15, DSM+11, KAR+15, LQZ+13]. $_4$ [LQZ+13]. $_5$ [LS11]. $_6$ [CJH11, CHW+15]. aMC@NLO [ADF+15]. $_pF_{p-1}, F_1, F_2, F_3, F_4$ [BKK13]. $_w$ [TMA+15]. $_x$ [LQZ+13]. A [ARYT17, HR11]. $A = $ [CHW+15]. α [HFSK12]. α_s^3 [GGGH14]. **$Apart** [Fen12a]. B_c [CWW15, YWW13]. Bc [WW12]. β [HS19]. $BR(B^0_{s,d} \to \ell\bar{\ell})$ [DNPS13]. C [Nik12b]. C_{3v} [Nik12b]. $\mathcal{N} = 4$ [SD15]. $\mathcal{O}(\alpha_t^2)$ [HP17]. $COCOS$ [SM13]. D [CZ17, Kap12b, KTB17]. $D = 4$ [Fis12]. $\Delta(\hat{S}^2)$ [MC17]. δf [DF14]. e^+e^- [YWW13]. $e^+e^- \to e^+e^-\pi^+\pi^-$ [CI11]. $e^+e^- \to e^+e^-\pi^0$ [CI11]. $e^+e^- \to e^+e^-R(J^{PC} = 0^{-+})$ [DKT14]. E_6 [Dep17]. ep [AFIS12]. η' [AHK+12]. $\eta m(Z)$ [CEPI10]. F [DGS+19, GAB+16, KTB17]. F_c [BK16b]. F_D [BKM14]. F_S [BKM14]. G [CNMC10a, HR11]. Γ [DEMM19, GTK+19a, BHN+16, CCM12, ESM17, HCM19, LL15, MM11, WT12]. γ_j [Ker17]. $GGA + U$ [HWW12]. GW [JGAL+13]. H [MR13]. hp [CMC+15, BCM+16]. $H\Phi$ [KYM+17]. i [HWM+15, KB19]. j [Wei11a]. jj [Erm18]. k [AWK+16, Ell17b, MDGC+12, OBH10]. k_T [vH18]. $k \cdot p$ [Bot12, MBF+10]. L [SS13b]. L_2 [ZY19b]. L_∞ [TK14b]. Λ [WL11b]. $\lambda\phi^4$ [Chr18]. $LDA + U$ [HWW12]. $\mathcal{O}(\mathcal{N})$ [PSP16]. μ [TACA15]. N [BBL+13, CDS13a, MTM13, MBFD12, PIH11, SGNL17, WSH+12, dlHV12, GJ14, RF10]. $N = 8$ [Fis12]. $Nf = 2 + 1 + 1$ [BBC+11]. ν [BHN+16, HCM19]. $O(N)$ [SPSP18]. O_h [Nik12b]. p [Wie13]. P^3M [KK17]. $p^m_{1/2+i\tau}(x)$ [GST12]. ϕ^4 [KVW11]. π [KS12]. q [FDWC12, KO13]. $q = 3$ [dSLF13]. Q^2 [HK12]. R [AB10, AKH12, Bot12, Des16, NPM16]. R_2 [Deg15]. S [ACDdM19, BG19b, DdMN16, LB10a, LB11, LB12, LB13, SAS11]. S^4 [LF12]. SO($2N$) [CECGS16]. SO(8) [Fis12]. $\star$ [Tos10]. SU(2) [Alv12]. SU(3) [BW12a]. SU(N_c) [CB13a]. T [HCRD14, TU14]. $T_1 - T_2$ [GWF+16]. T_2 [GCF+17]. T_c [CMJ+11]. T_d [Nik12b]. τ [CPWZ18]. Θ [BJ11]. U(1) [BB13a]. U(3) [LDD+19]. U(N) [LDD+19]. V [ABB+16]. W [QGLP13, Veb12]. $w = 8$ [ABRS19]. Ξbb [CWW10]. Ξbc [CWW10]. Ξcc [CWW10]. XY [KO14b]. Z [GLPQ11]. Z_2 [FWZ+12].

-body [CDS13a, MTM13, MBFD12, PIH11, WSH+12]. **-conjugated** [KS12]. **-coupled** [QSC14]. **-Coupling-based** [Erm18]. **-D** [WRBL19, FK12, Gio14a, GX15, LHJZ10, LHC+13, RKVL14]. **-dependent** [vH18]. **-diff** [TACA15]. **-dim** [GMF+17]. **-dimensional** [Kap12b, dlHV12]. **-electron** [PM16]. **-function** [ACDdM19, DdMN16]. **-gauged** [Fis12]. **-gradient** [ZY19b]. **-helices** [HFSK12]. **-Inclusive** [DLM18]. **-matrix** [BG19b, Bot12, Des16, HCRD14, NPM16, SAS11]. **-mesh** [AWK+16]. **-method** [DEMM19]. **-parity** [AB10, AKH12]. **-point** [MDGC+12].

-polymers [BJ11]. **-product** [Tos10]. **-qubit** [RF10]. **-ray** [BHN+16, CCM12, HCM19, LL15, MM11]. **-Reverse** [SGNL17]. **-scattering** [AFIS12]. **-space** [OBH10]. **-stable** [SS13b]. **-state** [FDWC12, KO13]. **-states** [LB10a, LB11, LB12, LB13]. **-topologies** [ABB+16]. **-type** [WL11b]. **-values** [Wie13].

/Python [SV14].

1 [BRH+16, TU14]. **1-loop** [DNPS13]. **1.0** [FYK18, KPK+17, RVDS16, SHW18, SNG+11]. **1.1** [LS15a, MSHL17, SRS+18]. **1.2** [CGV13]. **1.23** [DGPW11]. **1.4** [Wie15]. **1/2** [PGD17]. **10** [SV14]. **11** [Ara14a, Ara14b]. **12** [Nik12b]. **120** [Wei11a]. **180** [Nat10, Ram10, Ras17, Wu10]. **181** [ERS10c]. **182** [SGM11a, Sco13]. **183** [YQM14]. **184** [LR16, SIMGCP14, ZTG14]. **185** [AAT+20]. **186** [KYKN15a]. **187** [RHBH15a]. **198** [Ano20].

2 [AHH+19, AMR+18, CKFB12, DLU18, DDK+17, DES+11, Fen16, FP14, HD17, HM12c, JNN13, LS17b, dlRL11, dlRAPL11, dlRJL14, PGD17, PR12, RNdB19, RSBB14, TBB+14, ZE16, Cro16]. **2.0** [AFIS12, ACD+14b, ABH+18, BCH13, BHS15, DDKM15, GLPQ11, GBR+14, GTK+19b, HEPW13, HHS+10, KRM+19, Liu15a, LRR+15, LCRL10, OG14, PSMS14, Pat17, PBL+18, RDVS18, SZY+12, SZY+13, Sha16]. **2.0-Hybrid** [GBR+14]. **2.0.0** [BBH+11a]. **2.0.2** [VRV18]. **2.02** [DIR+19]. **2.1** [BH13, CNMC10a, PSMS15, QGLP13, SZY+13, YZCS18]. **2.2** [YZCS18, ZYL+15]. **2.8** [OK12]. **2.9** [OK18]. **2014** [MAM14]. **2019** [Sco19]. **213** [AZ17a]. **220** [Maź19, MLK+19]. **228** [SJY20]. **230** [Wei11a]. **2d** [WWVB11]. **2d-Ising** [WWVB11]. **2F** [ML17]. **2HDMC** [ERS10c, ERS10a, ERS10b]. **2HDME** [Ore19]. **2nd** [FMRP16]. **2ODEs** [ADdM14].

3 [CZ17, GLR17, LS17a, NGG+13, Pos18, Smi14, vH10]. **3-state** [MEG12]. **3.0** [BHJ+15, CXH+15, CK19, GCVA14a, LHWL16]. **3.1** [PS12]. **3.2** [LHG+19, Sem16, Sta13]. **3.4** [BCP13]. **39** [AANAJ12, MSNI11]. **3C** [Dan17]. **3V** [CC14].

4 [EJG+19, Gri10, Sta14]. **4.0** [KUVV13, OO15b]. **4.1** [KRW13]. **4.5** [CBYG18]. **4OEC** [SK15].

5 [CFS13]. **512** [WN19].

6 [Nik12b]. **6.4** [KRW13]. **6.5** [KRW13]. **64-bit** [TC11a].

70th [Pat12]. **77** [GH18, GHN19].

8.2 [SAC+15].

9 [Nik12b]. **9.0** [SMO16a]. **90** [GST12, KS12, SSG+10, SSG+18, SS10a]. **95** [FGJB19, vH10].

= [LQZ+13].

A-Track [AKKK16]. **A.I.K.E.F.** [MSM+11]. **AACSD** [LZ18]. **AAfrag** [KMO19]. **Ab-initio** [NSH+19, BKS15, QZ19, RH11]. **abelian** [MGS13, SV13]. **ABINIT** [ERP+12, GJA+16]. **AbinitioD** [GTK+19a]. **ABJ** [Pre18]. **abrasion** [EBCB+14, EBCBG17]. **abrasive** [EBCB+14]. **Abrikosov** [Maź19]. **abscissas** [Odr11]. **Absorbing** [NVW+13, DV11, Wil19]. **Absorbing-like** [NVW+13]. **absorption** [HZC19, VDA+19, YÇÖ15]. **Abstract** [SBQ14]. **abstraction** [BBB+19]. **abundances** [Arb12]. **accelerate** [XHLUF+18]. **Accelerated** [CGSB18, FSH13, JP11, SDS15, Sza13b, Sza13a, BS14a, BWB+17, BCFR15, BVP10, BTL+17, Cap13, CP15a, CGRB14, CH11b, CRB+17, DS13a, Exl17, FOB+15, GP13, GJ13, Ham11, HTJ+16, HXW+13, HbotRC15, KEH12, KM10, LGW13, LWRQ16, MÅWK18, MFM15, MHR+13, Ngu17, PR14, PBS+17, PQTGS17, Sai10, iSYS12, SKM15, WSH+14, XLX13, ARYT17, ELDS14, GHR+16, TL17, WXW14]. **Accelerating** [BK11a, Col14, EGT+18, FZY13, GM18, HV15, JK10, KLO+19, LHL16, RPL+14, SCJH19, SAY+18, SAN18, TK14a, WXW13, Kra18b, RB18]. **Acceleration** [ABDR17, BW12b, PE17, SM19, CBYG18, DRR16, ELL+17a, GCC+18, HE13, HPN18, JPCG15, KPA+19, LAG+17, MST+18, OP12, RLMGM+11, YLO13, ZWC+19]. **accelerator** [CdFDS16, HDF+19, TM19]. **accelerators** [KHBS19, LV19, MFS+10a, PR14, SM11, WWR+16]. **access** [GGI+13]. **accessible** [BHW+12, LPBH11]. **accompanying** [SS13c]. **Accord** [ABB+14, BBC+13a, MHA+12, Sta19]. **accretion** [Lan13]. **accumulated** [Wal11]. **Accuracy** [LOK+18, AQJ10, CLHL19, HHC16, NHS14, Pit10, WEH+19]. **Accurate** [BTM+17, DSLP11, GS17b, GS17a, IP14, JYPA18, JZZ+19, OT11, SW14a, Van15, BW16, BDJS18, BL19, CZZ+19, CdLOL19, CSP+19, Cou13a, Cou13b, DG10c, GJ18a, GJHF14, HBP+15, JK19, JSLM16, KAK12, LV14, LK12, LC15, MN16, MFG+13, PM16, PFFK19, PG10, PSP16, SC16a, TC11b, TL19, TW15, WLQ+17, mZfXL15, ZBN+19]. **accurately** [BMBC+17]. **AcerMC** [KRW13]. **Achievable** [GSKM15]. **acoustic** [HKvH16, IP14, LYL+17, MSHLS15, MSHL17, WP10b]. **acquisition** [Fer15, MGFRG12, RMW13]. **action** [ABB+19, CK18, Evs14, Wal11]. **activate** [TIMM13]. **activation** [BUJ15, PCR17]. **active** [CLY11, MTE17, OOGP19, SZM+14, DAW+19]. **Activity** [PCR17, BT17b]. **ADAIS** [ZFZ19]. **ADAMANT** [ML14]. **Adaptable** [DS11a, BCM+16]. **adaptation** [DF11a, JG16]. **adapted** [WPAV14, WW10]. **Adapting** [CUL+17]. **Adaptive**

[AS16, BDL+19, BS15b, MSM+11, NHD16, PG17, RPB+15, SHT18, SVG10, Sør19, YK19, ACMM19, AWK+16, ABH+19, ABRS12, CHDF10, CND11, EZBA16, FDZ17, FXZ+14, GCH+18, GX15, JK19, JFC12, JP10, JAS17, KV19, KRB19, LH18, LCHM10, LCHM13, LWRQ16, PIH11, RCGT16, RLBC+14, Sit18, UBRT10, XLX13, YWX11, ZD15, ZHPS10].
adaptive-resolution [ABRS12]. **adaptively** [JL19]. **adaptor** [BV13]. **Added** [LHG+19, BBL+13]. **Addendum** [Ram10, SIMGCP14]. **adding** [CL15b]. **adding-doubling** [CL15b]. **addition** [GB14]. **additional** [CCK23, GDB10, OTC14]. **additive** [MIW+12]. **address** [BY17]. **ADER** [FDZ17, QWZW18]. **ADG** [ADT+19]. **adhesion** [MS11, ZFBR11]. **adhesive** [RU12]. **ADI** [KRB15, SA15b, SL14, TY10, Tia11, ZFH14]. **Adiabatic** [YW17, YKS11, GCVA14a, HM17]. **adjacent** [NDSH18].
adjacent-rolling-windows [NDSH18]. **adjoined** [GCVA14b]. **adjoint** [GHR+16, VKS16]. **admission** [VPMVH+17]. **ADS** [LWP+17]. **adsorbed** [SSH16]. **Adsorption** [MJB11, VB11, EY11]. **Advanced** [GTK+19b, LBR+18, SLR+11, Ano11a, BKM11, CXH+15, KRM+19, PVH+17, Tan19, WGVPL17]. **Advances** [SMC+17]. **advantageous** [WRBL19]. **advantages** [RFSF18]. **ADVANTG** [BL18b]. **advection** [CYN19, JL10, MMA15, PSB11, PSBT12, WFV14, dTOV18].
advection-diffusion [WFV14, dTOV18]. **advection-dispersion** [JL10, PSB11, PSBT12]. **AELAS** [ZZ17a]. **aerodynamic** [ZS13]. **aerosol** [SSP16]. **AESS** [JP11]. **affine** [Naz12]. **Affine.m** [Naz12]. **AFiD** [ZPS+18]. **AFiD-GPU** [ZPS+18]. **Afivo** [TE18]. **AFMPB** [LCHM10, LCHM13, ZPH+15]. **Africa** [Che11]. **after** [DKMS19]. **Afterlive** [KSS18]. **aggregate** [MS11]. **aggregates** [HCRD14, RU13, Van15].
aggregation [Bis15, MST+18, MFLY19, WXW14, XLCW14, BR11, KdMvO14, LX14].
aggregation-fragmentation [MST+18]. **aided** [FLW17, Zhe15]. **Air** [MSML10, BTC+17, BG14b, KRB15]. **Airy** [JL12]. **Aitken** [HV15]. **Al** [TMA+15]. **alanine** [PSMS14, PSMS15]. **ALARIC** [VSG18]. **ALCBEAM** [BRL12]. **Alfvén** [BF10, HSK+12, TJH17]. **AlGaN** [YSN+14]. **AlGaX** [AM14b]. **algebra** [ABB+16, AG14, APV10, Bor14, Gio18, GNT17, MFS10b, MZE13].
Algebraic [JZJ18, CM10b, FLW17, GLZ17, JHH+19, Kap12a, Kap12b, NS15, SS10b, WR16]. **algebras** [Eks11, FK15, HR11, Naz12]. **Algorithm** [BR11, VRV15, VRV18, Wan10b, ART17, Alv12, AZM14, AM17, AFZ17, AFZ18, ATCZ19, BK13a, BWB+17, BJCW13, BR13, BVC13, BCM+16, BO12, BNO17, Bru13, BY17, BMDP19, CM10a, CHNS18, CNS+18, CC14, CC15, CWY+17, CZZ+19, CXG+19, CDS+13b, CZGC19, CGRB14, CBGY17, CBAM12, CLF18, DKSG16, DE13, DG10c, DG16, EZL+16, Eme11, ES11, FLA+16, FSJ+16, FRG12, FZ16, FKH15, GCF+17, GJ18a, GJLB12, GST12, GV15, GZW17, GTL11, GD14, GES13, GLX+14, GX15, GJ18b, Gwi12, HGCARM15, HWT10, HK15, HCH16, HP11, HZW+16, Jab12, Jab13, JWJL12, JWC13, JWM+18, JvOK17, JJ15, JPK+12, JKG+18, KP12a,

KBB+17, KO12, KO13, KO14b, Kom15a, Kom15b, Kom15c, KO16, KV19, KVW11, Krö19, KSW15, LM19, LDD+19, LKL11, LK12, Lee18, LKA+16, LM12, LHH+12a, Liu14, LZ11a, LZ11b, LYZ13]. **algorithm** [LTP16, Lya15, LOSZ13, MM17, MGO13, MPM14, MH11, MGS13, MEM+11, MC10, MTO15, MFLY19, NBN+14, Nem16, NFD+19, OL12, OOK+12, OCM+19, PH13, PSB11, PDRG10, PP13, PYW+14, PR10, PG17, PdMML19, QwWL+15, Ray10, RU13, Rom15, RW11, SGM11a, SGM11b, SCB+17a, SCB+19, SG15, ST19, SWL+15, SPS10, Sin12b, SKK11, SQA+15, SOYHDD19, SOJ14, Ste17, TMS19, TTT16, TIM+16, UW12, Urb18, US16, VSG18, VvAV+11b, VLL+17, VGM+15, WP11, WRFS15, WWHW14, Wei12, WRVdL15, XWhZ13, YZZ+17, YvOSM15, YLYL17, ZKG+18, ZZHG18, ZCC19, Zhe15, ZMJ13, Zou18, vRWS14, Cho11, KS16a, SKH+10, YKS11]. **Algorithmic** [HB12, Mey18, GHR+16]. **Algorithms** [Fri14a, KD17, KBLJ18, Pan15, TK14a, BS14a, BK11b, BAF18, CWJ19, CLH+17, CCW10, CR12, CF17, CLB11, DS11a, DS14, Dim14, DS13c, ER19, FDWC12, Fri10, FHA17, GBR+14, GWF+16, GBJ+19, GCHL15, GSC+16, Has11, HLLH16, HRC11, Hon18, HVMR10, HCSW10, JPH+14, KMS19, KK17, KME+11, LBM+14, LYJY10, Mag18, MEG12, MD11b, MA11, PBS+17, STK10, SGM18, SJ17, SMJ17, Sha18, TRM+12, VPP+12, Vuk12, WG11, XQ19, ZHC16, dSF18]. **Alias** [SKSK13]. **ALICE** [Ano19m]. **aligned** [DXY+19, HO13, HWS16, LDR+17, PHT+19]. **alignment** [BKM11, SJY18, SJY20]. **alkali** [SPAW17]. **All-electron** [KCA+15, ONS+15, AKZ+13, JGAL+13, LRW+15, RCGT16]. **all-optical** [PM14]. **all-speed** [Fu19b]. **all-to-all** [EPS15]. **Allen** [KL17, LK12, ZFH14]. **allowed** [HS19]. **alloy** [DGMZ15, KZ14, LS17a, SWL+15]. **alloys** [AM14b, CHDCJA17, NS11b, PE17, ZZH+16]. **almaBTE** [CVK+17]. **almost** [PdMML19]. **AlN** [Dan19]. **ALOHA** [dALM+12]. **along** [McM17]. **Alpgen** [CUL+17]. **Alphen** [RJ12]. **ALPS** [DBK+14, GAC+17]. **alteration** [SVG10]. **AlterBBN** [Arb12]. **Alternating** [Sok13, SPP19, XZ12, BDK11, LST15, TT14, XYK12]. **alternating-direction-implicit** [TT14]. **Alternating-order** [Sok13]. **Alternative** [ADdM17, Arb12, BKA+14, CLF18, KAR+15, SPP19]. **altruistic** [HLS12]. **Am** [MSNI11]. **AMB** [KB19]. **AMBER** [NBW16]. **Amdahl** [JAS17]. **AMGA** [Ano11a]. **among** [RE19]. **amorphous** [HYM11, MHV17]. **amount** [DO14a]. **Amp** [KP16]. **amphiphilic** [FFIH11, SSF+17]. **amplified** [EZBA16, ZLM12]. **Amplitude** [Raw15, BT17b, MPSV15, Raw16]. **Amplitudes** [DLU18, BBU11, BvH15, KvdO11, Per14, dALM+12, ADH+17]. **AMR** [GX15, TE18, TK19, ZKG+18]. **AMRVAC** [TK19]. **analog** [CO11, Fer15]. **analyser** [LW11, LW13]. **analyses** [Ham11, KSTR15, SUS+17a, WLM14]. **analysing** [BPMS16]. **Analysis** [BBB+15, Car10a, CAN11, GdGB+18, GES13, IB11, SLLP17, ÜS18, WHB16, vdSM16, AAA+16, ÁSS18, ASEA14, AS11b, AMR15, Ano11o, ADdM+12b, ACDdM14, APC+14, BHN+16, BKN+17, BHH+10, BBH+15, CSC11, Car10b,

CMRVVR+14, CF16, CPW17, CZL+11, DRR16, DGPOR18, EBCB+14, EBDM17, EW14b, EW16, Faw10, FF11, FNPMB10, FBN+13, Fri17, GWL+17, GMRHRCME13, GMPFC+14, GMC18, Gio14b, GMO19, GHBL18, GA13, GBJ+10, GBJ+12, GBJ+13, GFJ+14, GAO13b, Hak16, Hak19, HC16, HJL+14, JuIAM16, JCW+13, KKP11, KYKN15a, KYKN15b, Lev19, LS16, LHWL16, LRR+15, LWP+17, MMO+17, MLW+10, ME18, MB12, ML14, MPSV15, NEW+18, Nov17, Ost10, dlRJL14, OVSI15, PCVZ11, PVH+17, PM14, Ram10, RRCSCJ10, Ram19, RV10, RJW+19, Ruf13, RWKS15, SAA+10, iSYS12, Ser10, Sha13a, SLW19a, SLW19b, SLC11, Sin11, Sin12a].
analysis [SUS+17a, TRM+12, TBZ12, TS11, UW12, VV16, WLH+12, WLS13, XJS16, sX19, Yan09, GGF+13]. **Analytic** [BK13b, NS10, AC15, AC16, AC18, HSF+19, Kau13, KH19, LLG17, LLL12, LLL13, LYL+17, PSB11, PSBT12, Pat15, Pat17, Ser10, THDS16, TGUvS19, WAHL13, YOM+19]. **Analytical** [MCAdF14, NCS17, BHW+12, DS10, FMRP16, FJK+17, JDG12, KCT15, KR14, MRVF13, MHWH19, SVV19, Tan19]. **analytics** [DS15]. **analyze** [GWM13, GNT17]. **analyzed** [dSF18]. **Analyzer** [FCC15, RJW+19, KHZ+18, LZ18, ZLZ19]. **analyzing** [BPML12, SAHP15, WJCZ18]. **and/or** [XHLM12]. **Anderson** [BHT19, FFT+14, MST+18, SJ17, SPP19]. **angle** [HJ14, SLLP17]. **angular** [LN16, PR12, Pos18, Wei99, WT12]. **angustifolia** [VLM11]. **anharmonic** [Liu15a, LLZ+17]. **anharmonicity** [FCCTFR18, ZMCT12, ZMPT13]. **Anisotropic** [ZFZ19, HWS16, JG16, KYSV+15, LBB+16, MLW+10, McM17, MLS10, MN18, NO14, Ots11, SSB+16, SKML11, Tau10, VVB+12, XYZX19, YSVM+16]. **anisotropically** [CAN11]. **anisotropy** [BDK11, KGNS10, MS11, NO14, QZ19]. **annealing** [BSM13, BWB+17, CM10a, CD12, IZRT15, LOK+16, LM12, ON11, Yam16, JKG+18]. **annihilation** [BUJ15, GGGH14, Gre18, GT19, HLM13, Kol15]. **annotate** [BVC13]. **Announcement** [AAT+20, Hak19, YZCS18, AC18, SSG+18, WRMR19]. **anomalous** [CPWZ18, LRK13, PPV+11]. **ANOVA** [CC16]. **anQCD** [AC15, AC16, AC18]. **Ansys** [LNSD15]. **antenna** [THDH14]. **ANTICOOL** [Gre18]. **antiferromagnetism** [BG11]. **antipeakon** [HDZ14]. **antivortex** [BUJ15]. **any** [Fer15, HLTW19]. **APart** [Fen16, Fen12a]. **APCAD** [SLLP17]. **aperiodic** [PdMML19]. **aperture** [HKF+12]. **APFEL** [BCR14]. **APFELgrid** [BCH17]. **API** [NMCR15, Zag14]. **APINetworks** [MCNRC16, NMCR15]. **appearing** [LM16]. **Application** [BL19, BHH+10, BBH+15, CZD15, CGM17, CSSB15, DG10a, Evs14, GZL14, GJHF14, Hon18, HW12, IUM13, KPA13, Kom15a, Kra10, KOK17, Lan13, LHJZ10, MKU+12, MS14, MK10, PGO17, QA13b, RCH19, STK10, SGM11a, SGM11b, SCB+19, SCG11, TKS10, WWR+16, YK10, AAA+16, AS16, APS+16, BJBC+14, BG19a, BALV16, BMW14, BMNS14, Bru13, BDGM+17, CZ17, CGSB18, CTL15, CZGC19, CBYG18, CCN17, Dua12, FBHB17, FK15, Fer15, GBK+12,

GMHZ19, HCRD14, HTJ+16, HBP14, JHL+15, KPPC13, LOK+16, LWJV18, Mar19, NDSH18, OILK17, PEMS19, PS11, PB16, RWKS15, SPTPR19, SV14, SCJH19, Sva12, TFBW14, TC12, WZS+11, WX14, vRWS14, HD17, MFM15]. **application-driven** [BJBC+14]. **application-programming** [SV14]. **Applications** [CM10a, HH11a, sL10, RBB15, VDF15, Asc10, BDPM15, BKA+14, CMSV14, CCY18, Dim14, DBK+14, FUSH14, FOB+15, GMH11, GCHL15, HM18, JHH+19, JTW+17, JKG+18, KV10a, KMJS16, LM12, MCAdF14, MFG+13, NPM16, Pan15, PBL+18, Ram10, RDC+18, Sai13, SHW18, SKSK13, TK14a, Veb12, VSG18, WJCZ18, ZS13, MD11b]. **applied** [AHK+12, ASS13, BUJ15, BAR12b, DKSG16, FBN+13, GBSY18, HJL+14, KBB+17, KL11, LAG+17, LHB+19, MCP+11, NBCL18, SD14, TH17, VK14, WSTP15, Yam16]. **Applying** [HKZN17, KSH11, BS14a]. **approach** [ÁSS18, AV13, ABF19, AGVP10, Ano20, AKKK16, ADdM14, Aza13, BD12, BOGL17, BSK+18, BTC+17, Bot12, COK19, CSC11, CNMC10b, Cho11, CKCS13, Dan12, DF11a, DCU+19, DBP19, EKO16, ERP+12, FM12, FLW17, Fri19, GLAC13, GMC18, GR19, Gen10, GS14, GLX+14, GCVA14a, HO13, HFSK12, HCC14, Ixa16, Jiw12, JHL+15, JSLM16, KK16a, KY14, Kan14, KLKR11, KP16, KKL+18, KV10a, Kra18b, KSYY13, Lan13, LHJ+15, MGRB11, MLR10, Maź19, MBS+10, MC10, MLK+17, MLK+19, MCP10, MCNRC16, NS10, ÓN14, ONS+15, ORCR17, OK14, PC11, PLD15, QJF16, RS12, RM10a, RHC15, RJLL16, RCH16, RCH19, SGAA18, SLY18, Sch14a, SKK11, SCM+16, SMC+17, SSBS15, TVGB15, TGH+16, TUY15, VBMP15, VB19, WG16a, Wei99, WFV14, WAW14, XYZX19, YLK10, YK18, YG12, ZLLP17, ZLL13, Zió14]. **approaches** [AMR15, BDP16, BVSG19, CM10b, DS10, VEM12]. **Approaching** [mZfXL15]. **approximants** [IH11]. **Approximate** [CB13b, Hei12, JL10, CGM17, JC13, KMM13, LLL12, LLL13, MSR+17]. **approximated** [VDF15]. **approximating** [FM12]. **Approximation** [SMJ17, AQJ10, BKOZ16, BK12, Cou13a, Cou13b, Evs14, Kau13, KK14b, LY16, MJKB18, PDRG10, Ram10, RVDS16, RDVS18, WSTP15, WC15, Wit14, DVB11, YLO13, SKB10]. **approximation-based** [LY16]. **approximations** [Ike18, LO14, TK14b, ZY19b]. **AQUAgpusph** [CP15a]. **aqueous** [Beu11, Mar19]. **arbitrarily** [KMJS16, OL12, VSG18]. **Arbitrary** [Asc10, Tic14, Ara14a, Ara14b, BBH+10, BCH13, CCD+16, CLHL19, CC10a, ECSH16, FRW17, GM16, HSD17, KAH18, MSRL10, MSR+17, NO14, NMCR15, SH12a, STA18, SW14a, SVV19, SS11a, VV16, vH10]. **arbitrary-order** [SVV19, vH10]. **arbitrary-rank** [Ara14a, Ara14b]. **arbitrary-shaped** [HSD17, MSR+17]. **arc** [JTN+11, SCNJ18, SPAW17]. **Architecture** [PMS+15, SCC+12, BW15, CRA10, Dan12, EGT+18, GBK+12, MR14, NBW16, SM19, YLQ+17]. **architecture-independent** [EGT+18]. **architectures** [DS14, HdM16, HWCdM19, HAV+14, HWT10, NBN+14, PH13, RDN+17, TRM+12, TGH+16, VLPPM14, WEH+19, WFV14]. **Arduino** [KSH14]. **area** [BHW+12, EVB14, QLN14, YLK10]. **argon** [JTN+11]. **argon-water**

[JTN+11]. **argument** [CS17]. **arguments** [Cai11, Maî12]. **ARIADNE** [KRW13]. **arising** [CB13b, DBB12, KMM13, KR14, MN18, PDRG10]. **arithmetic** [MW19]. **ARKN** [LW14b, SW12a, SW13b]. **Armchair** [SPY11, GZL14]. **Arnoldi** [BW12b, GBP13]. **arrangements** [RC18]. **array** [ECD+10, HBS+11, Vuk12]. **Arrays** [HL18]. **art** [Pat12, MCAdF14]. **article** [Maź19, MLK+19]. **articulated** [PA13]. **artificial** [JYPA18, LWZ14, LWJV18, RH17, TMA+15, vRWS14]. **artistic** [GES13]. **ARUZ** [KHZ+18]. **ARVO** [BHW+12]. **ARVO-CL** [BHW+12]. **As/GaAs** [TMA+15]. **asasim** [Sør19]. **ASCOT** [HAK+14]. **ASG** [FBC+12]. **ASP** [JC13]. **Aspects** [SÜ18, DGS+19, EVB14, Ein16a]. **asphaltenes** [WXW14]. **Aspherical** [NP19]. **Assemble** [DEW16]. **assembled** [KK14b]. **assemblies** [YHCS11]. **Assessment** [HVMR10, Car16, NHS14]. **assignment** [BGHN19]. **assimilation** [BALV16, FBHB17]. **assisted** [BRB12, GTL+17, Wil15]. **associated** [LSF14, SSG+10, SSG+18, VDJ+11]. **Astrody** [LSJ13]. **Astrodynamics** [LSJ13]. **AstroPhi** [KCS+15]. **astrophysical** [GSKM14, KCS+15, RDC+18]. **astrophysics** [Asc10, CB13b, JFC12, KMM13, PDRG10]. **Asymmetric** [LTL+12, CFSK14, MNV13, SJY18, SJY20]. **asymmetry** [FSF11]. **Asymptotic** [BD12, CCHL11, CM14a, DOP17, MN18, CEF16, PSBT12, NO14]. **Asymptotic-preserving** [MN18]. **Asynchronous** [GXF+15, FFT+14, UBRT10]. **ATAT** [CSPAD10]. **ATI** [Dem11]. **ATLAS** [dAFdSVM12, MSS+16, DBD+17]. **atmospheres** [COK19, HTT13, HTT14]. **atmospheric** [BCMS10, BB12, CHH+11, KHBS19, LHH+12a, MFH+13, RDN+17, WW15]. **atmospheric-pressure** [CHH+11, LHH+12a]. **Atom** [Jav17, BH17, CLHL19, CYD11, DFM+15, Duf16, FZY17, KCA+15, LRW+15, LH11, RZ19, RGKR17, SGSG19, TT11, XLX+15]. **atom-centered** [KCA+15, LRW+15]. **Atomic** [FGJB19, Pit12, Ruf13, AAT17, BMF+19, CPV13, CJJ+17, CKS10, Col14, Cor14, DBJ11, EPP12, Erm18, Ert15, Fri12, Fri19, Gio14a, Gre18, Hei12, Hin11, Hir15, HL19c, JWL13, JTH14, JGB+13, KB19, KBSP19, KPST15, Kra17, Kra18a, LB10a, NPVR14, OT11, PM16, PVK+18, PLD15, SEW12, SEW14, SLW19b, WR16, YZZ+17, ZKW+15]. **atomic-molecular** [JWL13]. **atomistic** [AZ17a, AZ17b, BSC+13, CHDCJA17, CL13, DZ15, EBCB+14, EVB14, EBCBG17, GC12, HHP+16, KK13, KP16, LFKD18, LZ18, RK11, RPL+14, THDS16, Voy13, WBY11, VFV19]. **atomistic-continuum** [CL13, GC12, KK13]. **atoms** [AKV18, BH14a, BH14b, BRH+16, GJ18a, HL19b, Kob13, Lit13, MCA17, MGB18, SLK19, SPAW17, SJHS19, WL11b, ZZ15]. **Atomsk** [Hir15]. **ATOR** [CKFB12]. **ATSP2K** [BSGG10]. **ATSP2K-package** [BSGG10]. **attached** [SCNJ18]. **attempt** [GM18]. **ATUS** [MGL16]. **augmentation** [BGHN19]. **Augmented** [RCGT16, AM14b, CKT17, CSPAD10, DKSG16, DA16, Hol19, JGAL+13, KAW+10, PBMAD12, THJ+10, YLO13, JTH14].

Augmented-Wave [RCGT16, JTH14]. **auto_deriv** [SF10]. **autocorrelations** [CDS+13b]. **AutoDipole** [HMU10]. **automata** [FBG10, PC11]. **Automated** [AC13, ADT+19, BSWC14, HBP+15, HMU10, JC13, JC14, KHKR14, KH10, Per14, SPMM11, YFAT17, HR11, HKVR10, UW12, ZSW+17a, ZLZ19]. **Automatic** [CF16, DAW+19, Deg15, GAGW16, LV13, LHWL16, MV11, MO14, Ram19, RC11, Sta11, ZZ17a, ZFZ19, dALM+12, CL15a, CD15, Cha16, DZ15, Gio18, Kol14, Kol15, LLQX19, Liu15b, OK10, Ros16, Sem16, Sha13b, SF10, VKS16, Wie15, XWhZ13, YB13, ZPH+15, Zlo13, ZUT13, vH10]. **automation** [GBS+16a, GHvSF14]. **automatized** [Str15]. **Automatizing** [TdAdSS11]. **automaton** [FGC+11, JEFP14]. **autonomous** [Bla15, BCT17]. **autostructure** [Bad11]. **auxiliary** [GA15, JBKM15]. **auxiliary-field** [GA15]. **available** [Cip13]. **avalanches** [VKLM11]. **average** [SGSG19]. **averaged** [KQYH17]. **averages** [LP15, Wan16]. **averaging** [KFS17, Koh15, MMO+17, WHB16]. **avoiding** [SBB13]. **AVX** [GBS16b, WN19]. **AVX-512** [WN19]. **AVX2** [WN19]. **Aware** [dCD19]. **AWESoMe** [MSHLS15, MSHL17]. **axes** [BDK11, CNMC10a, CNMC10b]. **axial** [RS12, Sza13b, Sza13a]. **axial-symmetric** [Sza13b, Sza13a]. **Axially** [PSL+17, SSK+13, GHMB+19, MCP10]. **axially-symmetric** [MCP10]. **axis** [CLW11, DXY+19, JTP15, SMdONF14, YKK+19]. **axis-symmetric** [CLW11]. **axisymmetric** [EW16, Fuk17, KB15a, KRK16, LC15]. **azimuth** [LWZ14]. **Azurite** [GLZ17].

B [CCK23, CHW+15, HM17, LQZ+13, BH16, BSC+13, Fro11, Jiw15b, LD10b, LX12, RHC15, RCH16, ZF16]. **B-DNA** [BSC+13]. **B-spline** [BH16, Fro11, Jiw15b, LD10b, LX12, ZF16]. **B-splines** [RHC15, RCH16]. **BACHSCORE** [SZC+13]. **back** [KSYY13]. **backed** [LL15]. **backflow** [MBGV15]. **background** [KOT12, LCRL10]. **Bäcklund** [MWCY14]. **Backward** [NBCL18, VEM12]. **bacteria** [AD11]. **BADGER** [HM12a]. **Bailey** [BJCW13, BCJW13]. **BAL** [LS16]. **balanced** [EZBA16, OCF10, STA18]. **balancing** [BS15b, EDPZ19, ER19, FRG12, FN17, GMF+17, JFHA19, SKSK13]. **ballistic** [KLKR11]. **balls** [BHH+10, BBH+15]. **bamboo** [VLM11]. **band** [CKSM+19, CGRB14, GBP13, HC16, HLTW19, LOK+16, LHSL14, MD10a, MCV18, QDZ+13, RJ12, SW13a, SCG11, Zlo13]. **band-gap** [MD10a, SW13a]. **band-structure** [CKSM+19]. **banding** [SSF+14]. **bands** [ZZD15]. **bandstructure** [DSLP11]. **bandwidth** [CSV+18]. **Bank** [DPK+15]. **Baoukina** [BL18a]. **Barnes** [WSH+12]. **barrier** [CHC+11, DT11b, Raw16]. **barriers** [Den10]. **baryon** [DE13, LCL+11, Nem16]. **baryons** [CWW10, WW13]. **BASDet** [WG16a]. **Based** [ZXZ+19, AGB+15, BLPP13, BD12, BCJW13, BDKS10, BH17, BALV16, BLS17, BK12, BRL12, BPMM14, BHT19, BDBV12, BAR12b, BABC19, BMW14, Boe14, BO12, BPS+16, BCG+15, BC11, BS12, BBO19, BKK13, BKM14, BK15, BK16b, CM10b, CCLL18, Cap13, CMVRB+14, CSPAD10,

CC16, CGSB18, CMJ+11, CDL+12, CKhN11, CZGC19, CAGL13, CDR+15, DBMR18, DIP11, DSHS17, DG10b, DM17, DDH17, DRR15, DBLF16, DSPJ10, ELDS14, EBDM17, Erm18, ESM17, FRG12, FGC+11, FDWC12, FWS+17, FZY17, FHA17, Fu19a, GLZ17, GJ18a, GLX+14, GJ18b, GNT17, HLL13, HFOPF15, HKPF19, HPKF15, HWT10, HS16, HLD13, HKVR10, HM17, IH11, IKS19, ICPD16, JPCG15, JEC+12, JFHA19, rJmYT11, JGAL+13, JTP15, KVV19, KK13, KCN18, KK14b, KK14a, KHZ+18, KO14a, KSH14, KM17, KO12, KO13, Kom15a, Kom15b, KLV15]. **based** [KPST15, Kra18b, KMA+12, LCC13, LJE11, LFG14, LN16, LYX+17, LO14, Liu13, LH18, LY16, LRSS19, LWRQ16, LNP+17, MGL16, MB12, MHWH19, MKR+12, MW14, MNW+17, MNL19, MRL19, NPAD11, NDSH18, NAQ16, ÓN14, OLG+16, Oti13, OT11, OAKS11, ÖY13, PP13, PFFK19, PG17, PKRS16, RCGT16, RC13, RC16, RCH19, RB18, RH17, SVGS18, SAA+10, SC14, Sha18, Sha13a, SCRS17, SSX14, Sit18, SZM+14, SHL+11, SK10, SGSG19, TKJ19, TMS19, TGH+16, TMD11, TB14, TDL+14, UW12, VKP14, VSG17, VMGP+19, VDJ+11, VPP+12, WFZG19, WGG+19, WP10a, WLS13, WYH19, WSH+14, WBS+18, Wit14, XLL15, XGH+19, YLL+19, Zag14, ZAFAM16, ZLLP17, ZSW+17b, ZY19b, ZHC16, ZS13, Zhe15, Zlo13, Cho11]. **bases** [GLZ17]. **Basic** [GFB+10]. **Basics** [BC19, CB15a, CB17]. **basin** [LM19]. **basis** [CYOS19, Cor14, DM17, FM12, GYW+10, JH15, JDG12, KAK12, LRW+15, MCWJ15, Mey18, MBFB13, MK10, MCGR11, MAM14, ONS+15, PZY16, PVK+18, PSL+17, Pit12, PVK+14a, PVK+14b, PGMU19, Pra17, RCGT16, Ray10, RHC15, RCH16, RCH19, RLM13, SDM+12, SDS+17, SD10b, SMGK19, SSK+13, ZDWY10, ZDWM17]. **basis-set** [MBFB13]. **batch** [RJW+19]. **batched** [GNP19]. **bath** [Fri10]. **baths** [DS13b]. **bathymetry** [STA18]. **Bayesian** [AMR15, BPMS16, CRB+17, KZ14, KRB19, WG16a, ZHL11]. **Bayesim** [KRB19]. **BBN** [Arb12]. **BCC** [HBH+17]. **BCS** [RHBH15a, RHBH15b]. **BCVEGPY** [WW12]. **BCVEGPY2.2** [CWW15]. **Be** [MSNI11]. **beam** [BRL12, BKN+17, CZZ+19, FB19, KPA+19, KK17, KKO19, OKP10, PR14, PBL+18, QL10, TZK16, ZPvR16]. **beam-based** [BRL12]. **Beamlet** [AGB+15]. **Beamlet-based** [AGB+15]. **beams** [AGB+15, PBL+18]. **Beating** [CCL15]. **Becke** [GSZ13]. **bee** [vRWS14]. **BEEC** [YWW13]. **behavior** [CND11, DV11, FFIH11, HLS12, HST+11, MFS10b, SLC11, vMB14]. **behaviour** [RDN+17, WCT11]. **behind** [BEKP19]. **being** [GK11]. **belief** [EKDGG15]. **Bell** [DMH16, TZG12]. **Belle** [Ano11a]. **below** [BH17]. **BEM** [BD12, YBK+11]. **BEM/GO/PO/PTD** [BD12]. **Bénard** [GLW14]. **Benchmark** [BT17b, SISW10, FMRP16]. **Benchmarking** [BPP11, MNW+17, HdM16]. **benchmarks** [Yi11]. **BenderWu** [SÜ18]. **bending** [GSC+16]. **bent** [Bab14, BAF18]. **Bento** [HLM17]. **Benz** [HDM+12, SBPN15]. **Berezinskii** [RMC16]. **BerkeleyGW** [DSS+12]. **BerryPI** [AKZ+13]. **bespoke** [WWR+16]. **Bessel** [CCK23, Cai11, GDB10, JL12, KT10, Ser17, TO10a]. **best** [SS13a]. **Beta**

[HS19]. **Bethe** [GGG16, GVS+15, SAW18]. **between** [ABB+14, AC13, Ano10o, BB13b, CDBM16, FD13, FHTO17, DRI+16, GZL14, LSK+14, PDC14, TJH17, USOA13, VC10, Yan11]. **Beyond** [BM19, HLM17, ABC+18, BCP13, BHJ+15, Deg15, DNPS13, DML+16, GTK+19a, HRC11, PS12]. **BGK** [CM14a]. **biased** [Sin11, Sin12a]. **biasing** [Gio14b]. **BiCGGR** [TKS10]. **BiCGSTAB** [NIK+12a]. **BiconeDrag** [SPTPR19]. **bidirectional** [FSF11]. **Big** [GR19, Hoh18]. **biharmonic** [SK15]. **bilayer** [FPY+17]. **bilayers** [MSRL10]. **bilinear** [MWCY14, Ram10]. **BilKristal** [OG14, OO15b]. **Bill2d** [SLR16]. **billiard** [TTS11]. **billion** [YBK+11]. **Bimolecular** [SAG13]. **Bin** [CMRVVR16, GGG+19]. **binary** [CM10b, GCC+18, JuIAM16, LM12, WLU11]. **binary-coalescence** [GCC+18]. **BiNCa** [BKA+14]. **binding** [BBH11b, HSF+19, HM17, Jac19, PDC14, RJKC16, SHNM11, YLYL17]. **Binoth** [ABB+14]. **bio** [BG13a]. **bio-molecular** [BG13a]. **biochemical** [HL19a]. **BioEM** [CRB+17]. **bioheat** [BBB17b, IBB18]. **biological** [BHVMH15, CRNK12, NBM+15, Yan11]. **biology** [DS10]. **biomass** [XAPK14]. **Biomolecular** [VPM16, YBK+11, CBB14, GCH+18, LCHM10, LCHM13, SCC+12, TVZ+15]. **biomolecules** [Mar19]. **biophysical** [JJ15]. **biopolymers** [PA13]. **BIOTC** [XAPK14]. **bird** [TBB+14]. **birthday** [Pat12]. **bit** [MP11, TC11a]. **black** [DIR+19, Gin10, Giu19]. **black-hole** [DIR+19]. **BlackMax** [DIR+19]. **BlackNUFFT** [Giu19]. **blast** [SKH+10]. **Bloch** [CCW10, Dem13, SDL+16]. **Block** [CSV+18, DB13, FRFH10, JBG+16, JBG+17, LH18, SPS10, DKOS14, HM18, LW14a, NIK+12a, Nem16, STK10, SAY+18, SMUT19, TKS10, US16, VBS+17, WT15]. **Block-based** [LH18]. **Block-Krylov** [CSV+18]. **Block-pulse** [SPS10]. **Block-structured** [FRFH10, JBG+16, JBG+17]. **block-tridiagonal** [LW14a]. **blocking** [TSIM16]. **blood** [BTL+17, CRA10, MMC10, MBS+10]. **Blue** [CRA10, BW15]. **Blume** [FLP10]. **BN2D** [SBPN15]. **BNL** [GFJ+14]. **BO** [sX19]. **Board** [Ano18e, Ano18i, Ano18j, Ano10b, Ano10c, Ano10d, Ano10e, Ano10f, Ano10g, Ano10h, Ano10i, Ano10j, Ano10k, Ano10l, Ano10m, Ano11c, Ano11d, Ano11e, Ano11f, Ano11g, Ano11h, Ano11i, Ano11j, Ano11k, Ano11l, Ano11m, Ano11n, Ano12b, Ano12c, Ano12d, Ano12e, Ano12f, Ano12g, Ano12h, Ano12i, Ano12j, Ano12k, Ano12l, Ano12m, Ano13b, Ano13c, Ano13d, Ano13e, Ano13f, Ano13g, Ano13h, Ano13i, Ano13j, Ano13k, Ano13l, Ano14a, Ano14b, Ano14c, Ano14d, Ano15b, Ano15c, Ano15d, Ano15e, Ano15f, Ano15g, Ano15h, Ano15i, Ano15j, Ano15k, Ano15l, Ano15m, Ano16b, Ano16c, Ano16d, Ano16e, Ano16f, Ano16g, Ano16h, Ano16i, Ano16j, Ano16k, Ano16l, Ano17a, Ano17b, Ano17c, Ano17d, Ano17e, Ano17f, Ano17g, Ano17h, Ano17i, Ano17j, Ano17k]. **Board** [Ano17l, Ano18a, Ano18b, Ano18c, Ano18d, Ano18f, Ano18g, Ano18h, Ano18k, Ano18l, Ano19a, Ano19b, Ano19c, Ano19d, Ano19e, Ano19f, Ano19g, Ano19h, Ano19i, Ano19j, Ano19k, Ano19l]. **bob** [SPTPR19]. **bodies** [MNV13]. **Body** [GBJ+13, GBJ+15, GBJ+19, ADT+19, BBC+13b, BY13, BRH+16, CDS13a, CKS10, EKO16, FCVH17, FEH11, GBJ+10, GBJ+12,

GBFJ14, HEF12, HLZ+13, Ixa16, JWC18, JWM+18, JOK13, JDG12, KPA13, KPST15, KHN19, LSDD14, LB13, MTM13, MBFD12, NPAG11, PMMW15, PKRS16, PIH11, RC11, VvAV+11b, WZHE18, WSH+12, XMLC16, ZC12]. **Bogner** [CCK23]. **Bogoliubov** [ADT+19, SP18a, SSK+13]. **Bogolyubov** [PSL+17, SDM+12, SDS+17]. **BOINC** [GHdF10]. **Boltzmann** [Asi10, BBB+17a, BHNS17, BO12, CVK+17, CYN19, CAN11, CB16b, DCU+19, FGG11, FKH15, GTSL+13, GJ13, HLS+17, HCSW10, JK14, JEFP14, LCKM14, LCHM10, LCHM13, MOD13, MR14, Maz13, STA18, Sch14a, SSF+17, SD14, SD10a, TS19, TD17, WLU11, ZKG+18, ZXZ+19, ZCG17, vdS10, vdS13, vdSM16]. **Boltzmann-cellular** [JEFP14]. **Boltzmann/finite** [CRA10]. **BoltzTraP2** [MCV18]. **BoltzWann** [PVK+14a, PVK+14b]. **bond** [CM15, HSF+19, MH11, THDS16, WDR16, XZF12]. **bond-order** [HSF+19, THDS16]. **bond-orientational** [WDR16]. **bonded** [BL14, Faw10, GTPWL12]. **bonding** [Sva12]. **Boost** [Ein16b]. **boosted** [LV19]. **Boosting** [BL18a, dJBIM16]. **BOPfox** [HSF+19]. **Boris** [Ume18, Ume19]. **boron** [HW12, Yan11]. **borrow** [Sib17]. **Borwein** [BJCW13, BCJW13]. **Bose** [CCW10, GM14, Hoh14a, JWC13, JWL13, KLM+19, LCCC11, MT13, TZM17, US16, VBMS17, WX11, WX14]. **boson** [BGM+14, Brá15, Cas12, DDKM15, EMW19, KKSY18, OK12, QwWL+15]. **bosonic** [ZBG+16]. **both** [ACDdM19, LM19]. **bottle** [HP11]. **bottle-brush** [HP11]. **bottom** [HLM13]. **bottom-quark** [HLM13]. **bounce** [KQYH17]. **bounce-averaged** [KQYH17]. **bounces** [GLAC13]. **Bound** [Eba13, LB13, BK11b, CLHL19, DT11b, HL19b, LV13, MLEM19, SAW18, XJS16, HL19b]. **bound-state** [SAW18]. **boundaries** [ADdM+12b, CdLOL19, DV11, FJK+17, HSD17, KSH11, KS16a, LFKD18, NVW+13, VDA+19]. **Boundary** [KS16a, KPPC13, WLU11, YZ16, BMHP17, CCHL11, CS10, CBB14, DG10a, DS13c, DGG13, FBHB17, GJ13, GN14, Ham11, HSD17, Hon10, JYPA18, Jiw15b, LX12, LWZ14, LXR+18, LCQF18, LS13, MRL18, MRVF13, Mil16, NPM16, NCB18, PN15, PS11, PLCC12, Qia17, Ras09, Ras17, RC13, RC16, RHH12, RTA10, STA18, SP18a, SCNJ18, SN16, SK14, Uty14, Wan16, Wil19, YS17, ZWLZ17, ZLL13, vdS13]. **boundary-layer** [Ras09, Ras17]. **boundary/cut** [NCB18]. **boundary/cut-cell** [NCB18]. **bounded** [MRVF13, ZPS+18]. **boundedness** [MD11a]. **bounding** [WP11]. **Bounds** [TK14b, BBH+10, BBH+11a]. **Boussinesq** [BL19, MA11, SD10b, TL17, YZ16]. **Boussinesq-type** [TL17]. **BOUT** [LXR+18]. **box** [Giu19, GES13, JLW13, SOPS12, WP11, YdDH+12]. **box-counting** [GES13]. **brachytherapy** [CCY18]. **brackets** [GKM10, GSMK17, MBGK11, MGK13, SMGK14, XMLC16]. **braided** [OVSI15]. **branching** [FSF11]. **brane** [DIR+19]. **branes** [DIR+19]. **Bratu** [Ano20, Jal10, KK16a]. **Bravais** [HLTW19]. **break** [YS17]. **Breakdown** [KD16, CGSB18, HKF+12, JHJG14, YLKN17, ZW15]. **Breaking** [GTPWL12, EW14b, LRC+11]. **Breit** [Bad11]. **BREMS** [Pos18]. **bremsstrahlung** [Pos18, Eme11]. **Brenner** [FMRP16]. **bridges** [BALV16].

Bridging [RK11, RV10]. **brief** [Bre10]. **Brillouin** [GJ18b, Kap12a, WQ18]. **Brillouin-zone** [GJ18b]. **brings** [CDSG11]. **broad** [BNV18, Ber14]. **Browndye** [HM10]. **Brownian** [BALV16, BMG+15, CHNS18, CSSB15, HM10, SKM15, TSTT13]. **brush** [HP11]. **brushes** [Krö19]. **brute** [LS16]. **brute-force** [LS16]. **BSMPT** [BM19]. **bubble** [NZQL14, Wai12]. **Bubbleprofiler** [ABB+19]. **bubbles** [SPS18]. **bubbly** [HKPF19]. **builders** [Sta14]. **Building** [BCJ+11, MW14, TOB+14]. **bulk** [KSL+11]. **bunch** [FB19]. **bundled** [CSL+13]. **Burgers'** [BK16a, Jiw12, Jiw15a, KP14]. **Burke** [Sco19]. **Büttiker's** [KKS18].

C [ADH+17, Ano11o, Ara14a, Ara14b, Asl14, BV13, COK19, CECGS16, DPW16, Ein16b, Fow18, GH18, GHN19, GC10, GC13, GC16, GC18, GCK19, HL18, KvdO11, KPV16, KLV15, KKO19, KYSV+15, KLM+19, LCJ10, LSDD14, LYSS+16, MD11b, MCAdF14, Sai13, SV14, SS12, Sch18, SWS+12, Smi15, SJHS19, Stu10, TS11, Ver16, VVB+12, Vuk12, YSVM+16, HFSK12]. **C#** [GBJ+10, GBJ+12, GBJ+13]. **C-code** [GC10, GC13, GC16, GC18, GCK19]. **C-library** [MD11b, MCAdF14]. **C2x** [Rut18]. **Ca** [CJH11]. **cable** [OVSI15]. **cache** [SSF+14]. **caching** [WMRR17, WRMR19]. **Cadabra** [Bre10]. **CADISHI** [RK19]. **CADNA** [JCL10, LCJ10]. **CADNA_C** [LCJ10]. **Cahn** [KL17, LK12, LLXK16, XYZX19, YZ19, ZFH14]. **CalcHEP** [BCP13, Sta10]. **CalcHep/CompHep** [Sta10]. **calculate** [BBU11, CATK11, FLE19, Fen12b, KA17, KST+14b, MPS13, Sar17b, SHZ13, UFKB19, ZKW+15]. **calculated** [HS16, LS12b, RJ12, YFAT17]. **Calculating** [ABB+16, ECSH16, Fon12, LKM+16, AM10, AM11, Arb12, AMR19, BBL+13, BNV18, BBPS14, Brá15, CLJ12, EZBA16, FS17, FEH11, GPS+13, HEF12, HL19b, Jab12, Jab13, LZL11, LCHM10, LCHM13, MCV18, MH11, NGM+10, PH13, PCR17, Pos18, SEW12, SEW14, STY15, STY18, SC16a, SPAW17, SW12b, VDJ+11, WCL14, YLTS16, ZMCT12]. **Calculation** [GKM10, Kir10, LXR+18, MK19, Pla16, Sar17a, SMGK19, WW15, WBY11, AHK+12, AC17, AG14, AAT17, Aza13, BGM+14, BPC12, Buc19, CMVRB+14, CMRVVR+14, CHDCJA17, CYD11, CFSK14, Cip11, Cip13, CM14b, DBDP12, DSS+12, DRR15, DNPS13, Eba13, ELL+17a, FWZ+12, GSMK17, GAHP15, GM16, HLM13, HK15, HAN+16, JL12, KAK12, LPRPR17, LFKD18, LSF14, LKL11, LSCZ11, Liu15b, LHGF18, MGK13, MSNI11, MPSV15, MSRL10, MSHLS15, MSHL17, MC17, NKS15, Nik12b, ORCR17, PBMAD12, Pat15, Pat17, QZ19, QZWU19, QLN14, Ram10, RK19, SD10a, Shi16, SS11a, SZM+14, SKK11, Sta11, Ste17, SMGK14, TZG12, TMA+15, WLGY18, Wei99, Wit14, XMLC16, Yan09, ZPH+15, ZTG13, ZTG14, ZFBR11]. **Calculations** [Lit13, PDC14, YZY10, APS+16, ART17, AC15, AC18, BK13b, BC10, BDPM15, DdJC+19, BH17, BBH11b, BS13b, Bor14, BHS15, CLHL19, Cas12, CKSM+19, CPV13, CCGC13, Cor14, Cri18, Dan11, Dat13, DN18, DSW+15a, DHS14, DA16, DO14b, DML+16, EJG+19, Erm18, FSH13,

FUSH14, FCC15, Fri12, FZY13, GA15, GGG16, GVS+15, GBSY18, HSF+19, HWW12, HHS+10, HW12, HL19c, Jac19, JPCG15, JWCW17, JL19, JOK13, KB19, KT12, KCT15, KKL+18, KSL+11, KPK+17, KPST15, KH10, LA13, LS19, LZP12, LSR+17, LS17a, MED11, Maź19, MAM14, MLK+17, MLK+19, NGG+13, NSXZ14, Nis11, OBH10, OT11, PB13, PUO14, PKRS16, PSP16, RPL+14, Roh16, RC11, SAW18, SW14a, SZ15, SCRS17, SAY+18, SPMM11, SMUT19, SLR+11, SSF+14, SST11, Smi14, Smi16, SQL+10, SPSP18, TC12].
calculations
[VSG17, VCMS+13, WL11a, WR16, Wil15, XJS16, Zit11, VPM16].
calculator [ERS10c, ERS10a, ERS10b, HTY17, ZZH+16, ALL+11]. **calculus** [GLMG12, KD17, SBQ14]. **Calibration**
[BMG+15, BDGM+17, Ost10, ZUT13]. **callbacks** [BV13]. **calorimeter** [dAFdSVM12, GRZ10, BPMM14]. **CALPHAD** [TKP15]. **CALYPSO** [WLZM12]. **Camassa** [ZST11]. **camera** [MGA+13]. **CAMORRA** [KvdO11]. **Can** [Pra11, CBB14, KSL+11]. **cancer** [SCW+11].
cancer-related [SCW+11]. **candidates** [BBPS15]. **CANONICA** [Mey18].
Canonical [AS16, PA13, GA15, Mey18, Pra17, PLCC12, RMC16, Sit18].
canonical-ensemble [GA15]. **canonicalization** [Nie18]. **capabilities** [OTC14]. **capability** [LLE+18]. **capacitance** [CLC14]. **capacities** [ZMCT12]. **capacitively** [SBL16]. **Capel** [FLP10]. **capillaries** [vdS13].
capped [RM14]. **Capture** [SGAA18, GT19, SR12]. **capturing** [Fu19a]. **Car** [VCMS+13]. **carbide** [OPR14]. **carbon**
[Beu11, CSL+13, LHSL14, OPO+11, OPSR13, OPR14, RM14, TM19].
carcinogenesis [SCW+11]. **cardinal** [LD10b]. **cardiovascular** [MBS+10].
cards [GLB13, RPL+14]. **Carlo**
[ZTG14, AFIS12, ASGLK10, AK15, ABB+14, ASPDL+16, AIG16, Ano10o, AK13a, AK13b, AMJ18, BKV16, Bar11a, Bar12a, BDP16, BVP10, BG11, BMW14, BG13b, BLG14, Bon15, Bon16, BHJ+19, BMDP19, BENK+17, CXG+19, CL11, CZGC19, CL15b, CKS10, CNS+14, CI11, CK19, DSHS17, DGPW11, DEMM19, DPK+15, Dem11, DDKM15, DKT14, EBDM17, ES11, FGGM11, FLE19, FW11, FDWC12, GTPS19, GA15, Gin10, GSB+14, GWF+11, GB17, HKZN17, HKZN19, HBE10, HMR14, HP11, HWM+15, Hua17, IUM13, JPSS10, JLA+14, JA17, KOT12, KMO19, KEH12, Kan14, KRW13, KC14, KKK+17, KNS+17, KV19, KLO+19, KSW15, KPVvdH13, LS14, LS15a, LS15b, LLE+18, LWL11, Lut15, MP11, MBRV+13, MRZ10, MEM+11, MW14, MHR+13, MMY+19, NPAD11, NHD16, NDSH18, NSXZ14, NBCL18, NM14, OPO+11, OPSR13]. **Carlo**
[OPR14, PZL+19, PEMS19, PM14, RF16, Ram19, RMS+12, RV10, RV11, RB18, SI11, SGNL17, SFP11, SL16, SHT18, SMJ17, SM19, SD14, SKFP16, SLZ16, SSF+14, SKM15, SKSK13, TZG12, TVZ+15, Tic10, Tic14, TKP12, TMS19, TU14, Trö11, TDL+14, UKKB19, UA17, Urb18, VK14, WRFS15, WDL11, WSTP15, WBS+18, WvSL13, WT12, WWVB11, WLZN17, XGH+19, YWOD19, ZBG+16, ZLM12, ZTG13, ZDD+13, dSF18, dHGCS11].
Carlo-based [EBDM17, MW14]. **carlomat** [Kol14]. **carlomat_3.0** [Kol15].

carrier [Buc19]. **carriers** [MSRL10]. **Cartesian** [BOGL17, BLAS19, FZY17, MAM14, NKS15, SDM+12, SDS+17, SHL+11]. **Cartesian-grid-based** [FZY17]. **cascade** [LMAB16, SZY+12, SZY+13, SZM+14, TB14, ZYL+15]. **cascaded** [LJD+19]. **cascades** [BTM+17, Fri19, KOT12, RLS16]. **case** [Asi10, CMRVVR+14, Che11, CZ19, FKL13, sLqSqL+13]. **Casimir** [AG14]. **CASS** [FBC+12]. **Castep** [Rut18]. **catalogue** [Var16]. **cathode** [SCNJ18]. **Causal** [CK18]. **CAVE** [BHH+10, BBH+15, OK10]. **CAVE-CL** [BBH+15]. **Caveats** [CH11b, SYE+18]. **cavities** [AG14, BHH+10, BBH+15, CBB14, CdFDS16, VBMP15]. **cavity** [LLSK17]. **CBFM** [GMC18]. **CCA** [FLZ+18, ZXL16, ZZD+16]. **CCD** [SL14]. **CCOMP** [Zou18]. **Cd** [DSM+11]. **CE** [NAQ16, QYM11, QA13a, SP18b, WZS+11, CHW+15]. **CE/SE** [NAQ16, QYM11, QA13a, SP18b, WZS+11]. **Celeris** [TL17]. **Celestial** [LSJ13]. **Cell** [BOPL17, DS11a, HZW+16, AM14a, BPB+17, BCP+16, BDL+19, CH19, CC14, CC15, DBP+18, DG16, GHMB+19, JvOK17, KKG+15, KHK+11, LJE11, LYJY10, LWRQ16, MKL17, MKU+12, MEM+11, MTO15, NCB18, OBPL19, PG17, QDZ+13, QL10, RKVL14, SSS+11, SC15, SC16b, SKK17, Sok13, VS19a, VMFS16, WWC+16, WN10, WG11, ZLFM11, CDBM16, CHZ18, DS14, IBP+15, KC18, LKA+16, PMMF15, RD10, SVG10, SBE+16, VKLM11, VLM11, VLL+17]. **cell-based** [LWRQ16]. **cell-centered** [SC15, SC16b]. **cellGPU** [Sus17b]. **CellMatch** [Laz15]. **cells** [BTL+17, DJ12, FRG12, HGCARM15, KMJS16, Laz15, LHG+19, NGCI+12]. **CellSim3D** [MÅWK18]. **Cellular** [TD11, CRA10, FGC+11, FBG10, JEFP14, MÅWK18, PC11, DG16]. **center** [BAR12b, DT18, Nis11]. **centered** [KCA+15, LRW+15, SC15, SC16b]. **CENTORI** [KTE+12]. **central** [DJ11, GST15, QA13b, TYH+15]. **centre** [PCGM14]. **centric** [Sie16]. **Centroid** [AS16]. **Centroidal** [JFHA19, FJ19]. **Cerenkov** [LYX+17, YXD+15, YXT+15]. **CESE** [FXZ+14]. **CFD** [CDR+15, HdM16, HJH17, KDM17, LNSD15, LSD18, Sha13a, XAPK14]. **CFEL** [FBC+12]. **Chain** [EBDM17, KSW15, APV10, Lev19, RV10, RV11, UIY11, LN16]. **Chain-based** [LN16]. **chains** [BDK11, KS19, Krö19, MNC15]. **challenges** [KT12]. **Chambers** [DAW+19]. **Chandrasekhar** [Jab12, Jab13, Jab15, Jab19, MR13]. **change** [HYM11]. **changes** [BLS17, LSD18, ZBMM11]. **Channel** [KSW15, CCL18, Des16, GCVA14a, LLQX19, ZLFM11]. **channeled** [Aza13, BP12]. **channeling** [Aza13]. **channels** [BEKP19, TXZL15, WJHW14]. **chaos** [GBJ+10, GBJ+12, GBJ+13, GFJ+14, GBFJ14, MCL+17, GBJ+13, GBJ+15, GBJ+19]. **Chaotic** [HVP+19, ADdM16a, ADdM17, GTS14, HLD13, KI11, ÖY13, RDN+17, TTS11]. **CHAPLIN** [BD14]. **CHAPLIN-Complex** [BD14]. **characteristic** [LSDD14, MH18]. **Characteristics** [TGH+16, CSRV13, KK13, KFF+16, SZM+14, TKJ19, SC14].

characteristics-based [TKJ19]. **Characterization** [CKLM10, HFSK12, CZN14]. **characterize** [Mar19]. **characterizing** [SPY11]. **Charge** [Kap16, SCW+11, Buc19, CC14, CC15, CAGL13, MSRL10, MTO15, NFI17, iNSK+15, PFFK19, Qia17, SGM11a, SGM11b, Sok13, VLL+17, XNK+16, YXT+15]. **charge-conserving** [CC14, CC15, MTO15, Sok13]. **Charge-sign** [Kap16]. **charge/current** [VLL+17]. **charged** [BBH+11a, BG13b, BG14a, BLG14, Bon15, Bon16, BAK+17, CLC14, Gwi12, KB15a, KRK16, KFS+13, MF17, NJ18, PCGM14, SBPD19, SKK11, TAFD19, Ume18, Ume19, XQ19]. **charges** [SGDS16]. **CHARM** [PLRT14]. **Chebyshev** [DT11a, LD10b, SW14c, Wan10a]. **check** [HWW12]. **checkerboard** [BW12a]. **checking** [ÇÖSÜ11, Yam16]. **CheckMATE** [DDK+17, DDK+15, KSTR15]. **chemical** [BBF+10, BO12, BSWC14, DBDP12, GAGW16, LCC13, LSK+14, LL12, MLGVE14, MEG12, NCS17, dlRJL14, PBD+15, Pla16, PB16, RH11, SAN18, SAG13, TM14, TPC16]. **chemically** [MTE17]. **chemistries** [YFAT17]. **chemistry** [CHH+11, GHK19, IIO16, KEH12, Sou14, WPAV14, WMI19]. **chemokine** [rJmYT11]. **CheMPS2** [WPAV14, WPD+15]. **Chen** [HLD13, ÖY13]. **Cherenkov** [GV15]. **chi** [GST15]. **chi-square** [GST15]. **CHICOM** [Gag12a, GHN19]. **CHIEF** [MJKB18]. **chiral** [CZ19, GBD10]. **CHIWEI** [Gag12b, GH18]. **choice** [DDM14]. **Cholesky** [LHJZ10]. **choosing** [GLR17]. **Christoffel** [JC16]. **CI** [DKG+14, KPST15]. **CIF2Cell** [Bjö11]. **CIJET** [Gao13a]. **circuit** [LW11, LW13]. **circular** [DA16, KGG+16, LWZ14, OILK17]. **citation** [wHwH11]. **CL** [BHW+12, BBH+15]. **clarifying** [vMB14]. **class** [BPC12, BPC13, GCHL15, Kra17, Kra18a, LLP15, MP11, MST+18, MNOØ11, SS13b, SCM14]. **classes** [rJmYT11]. **Classical** [CPHL14, VMFS16, BDJS18, BTM+17, CEF16, DT11b, DS13b, GH15, Gwi12, KO12, MCV18, SKK11, SLR16, SA14, WJCZ18]. **classically** [Wil15]. **classification** [CFSK14]. **classifications** [sL10]. **ClassSTRONG** [CPHL14]. **clathrate** [MD19]. **cleaning** [LLQX19]. **Clebsch** [HR11]. **CleGo** [HR11]. **climate** [DBD+17, MW19]. **cloning** [BS12]. **close** [BAK+15, BAK+16, BAK+17, WISA11]. **close-coupling** [BAK+15, BAK+16, BAK+17, WISA11]. **closed** [Faw10, MCA17, SL17]. **closed-shell** [Faw10, MCA17]. **closure** [CXL19]. **cloud** [CNS+14, JTW+17, JVR12, KCN18, VPMVH+17]. **clouds** [APC+14, JH11]. **CLUMPY** [BHN+16, HCM19, CCM12]. **Cluster** [LX14, PEMS19, Smi14, BTC+17, CSPAD10, CGSB18, CZGC19, FLW17, GTL11, HLW16, JSLM16, KP12b, KSL+11, KO12, KO13, KO14b, Kom15a, Kom15b, Kom15c, KO16, KZ14, LKM+16, MCA17, MTM13, MFLY19, TKR13, TMS19, XLCW14, ZSW+17b, LX14]. **cluster-application** [CGSB18]. **cluster-cluster** [MFLY19, XLCW14]. **Cluster-Expansion** [PEMS19]. **cluster-labeling** [Kom15a]. **Cluster-parallelizable** [Smi14]. **Clustering** [HBP14, MKMK10, DAW+19, LLHC11]. **clusters** [BBF+13, BG13b, BG14a, BLG14, Bon15, Bon16, BRH+16, DRR16, DCVB+13, GS17b,

GZZ19, Gwi12, KSL+11, LLHC11, Law19, LSYZ12, LS17a, RRCSCJ10, RD10, SKK11, SQL+10, VK14, YZZ+17, YHL11, YLYL17, ZPS+18]. **CMBE** [GFJ+14]. **CMFD** [PZL+19]. **CMIstark** [CFSK14]. **CN** [PYW+14]. **CN-ICCG-FDTD** [PYW+14]. **Co** [CJH11, LQZ+13, DS13c, TG11]. **coalescence** [GCC+18]. **Coarse** [GB11, AGVP10, AMJ18, ESM17, FPY+17, HJE+19, MNL19, NLB+19, PA13, SM19]. **coarse-grained** [AMJ18, ESM17, FPY+17, NLB+19, PA13, SM19]. **Coarse-graining** [GB11, MNL19]. **coated** [CKLM10]. **coating** [CDSG11]. **Code** [GHN19, KUV15, ZCC19, Bab14, BSM13, BNV18, Bar11a, Bar12a, BMU11, BDPM15, BH14a, BW12a, BM16, BRL12, BG13b, BG14a, BLG14, Bon15, Bon16, BF10, CR13, CTT17, CJ12, CCM12, CPR12, CL14, CB16a, CB16b, DCM+12, DET12, DGJH19, DLGP10, DBJ11, DBP+18, DT11b, DT18, DA16, DGS+19, DFM+15, Duf16, EZBA16, Ein16a, ELL+17a, FVH18, FLZ+18, Faw10, Gag12b, Gag12a, GH18, GLPQ11, GSMK17, Gio18, GC10, GC13, GC16, GC18, GCK19, GHBL18, GAB+16, GBJ+13, HdM16, HBE10, HV15, Hak16, Hak19, HCRD14, HTT13, HTT14, Hol19, HF16, HHM+15, IBP+15, JuIAM16, JCW+13, JFC12, JGAL+13, JHL+15, KHB14, KSS18, KPA+19, KTE+12, KBSP12, KCS+15, LAA+10, LLE+18, LHH+12b, LJZ+18, Lit13, LO14, LL15, LDF+16, LMAB16, LRSS19, LR13, LR16, MDW16]. **code** [MT13, MD19, MGA+13, MGRB11, MRSU14, MTM14, ML17, MW19, MTM13, MAM14, MSHLS15, MSHL17, MJKB18, MO14, Nik12b, NMS14, OBPL19, dlRL11, dlRAPL11, Oti13, PPV+11, PBMAD12, PGD17, PG10, PVK+14a, PVK+14b, PBL+18, PGMU19, RF16, REtVH12, RtV16, Rei10, RB18, RWKS15, RHBH15a, RHBH15b, SSS+11, SCB+17a, SKB10, SGNL17, SL16, SHW18, SEW12, SEW14, SRS+18, SM14, SHZ13, SQS+16, SD10a, SS11a, SC16a, SC15, SC16b, SHL+11, SCB17b, SF10, SGSG19, SMGK14, TAFD19, Tau10, TVGB15, TRN16, TKL+12, VKP14, VSG17, VPM12, VMGP+19, WLQ+17, WN10, WR16, WEH+19, WSH+12, XAPK14, YLKN17, Zag14, ZD15, ZXL16, ZZD+16, ZZSW19, ZMPT13, vWB10, MZE13, GBJ+10, GBJ+12, OKP10, SKK+19]. **Code_Saturne** [Sha13a]. **codes** [BDL+19, BPP11, BFPP12, CYD11, DGS+19, FMRP16, Gio18, HWCdM19, HTJ+16, HL18, ILZ+19, KLV15, Kro16, LW14a, LZ17, LTP16, MHA+12, MNPY14, OLG+16, PMMF15, Rut18, SISW10, Sch18, VLL+17, VKS16, VGM+15, WRFS15, XNK+16, YB13, YXD+15]. **coding** [BBB+17a, CFCB12, FFT+14]. **coefficient** [BBB17b, IBB18, PR13, PYW+14]. **coefficients** [ABC+18, ARYT17, BNPPD19, CATK11, DT10, Dev12, HR11, Ixa12, KKS18, LZZL10, LKT+16, MCV18, Moh14, ORCR17, PKT15, Shi16, SMGK19, VCD16, Wei99, Wit14, YÇÖ15]. **CoFFEE** [NJ18]. **CoFlame** [EZL+16]. **coflow** [EZL+16]. **coherence** [SSM+17]. **coherent** [BP12, CCXC15]. **coincidence** [WT12]. **COKOSNUT** [SCB17b]. **collaborative** [DBP+18, Liu14]. **collapse** [BNAB11, KHN19]. **collective** [GLR17, Gio18, WR16]. **Collider** [BBB+18, CKhN11, EFG+10, BCP13, BDDM18, CFS13, YWW13, BSW12].

colliders [AHH+19, BDC+14, BHZ13, CM14b, DDKM15, Gao13a, GLS+13]. **colliding** [Lit13]. **Collier** [DDH17]. **collision** [ART17, BTM+17, BO12, CYD11, HPN18, HDZ14, MWI+19, NNWS15, RF16, SD10a, WSH+14]. **collisional** [CXL19, DGS+19, HJ14]. **Collisions** [BH14a, BH14b, CUL+17, CKS10, Col14, DCC+10, Gin10, GFJ+14, GBJ+15, HL19c, JH11, KKK+15, KHB14, KHK+11, KNS+17, MEM+11, Nis11, OK12, OK18, SZY+12, SHT18, SQS+16, SKK17, Tom16, VC10, VS19b]. **Collocation** [LD10a, LX12, LCCC11, MM10, PDRG10, ZWLZ17, ZST11]. **Colloidal** [TCCV18, BHND16, DGPOR18, HAN+16, HCSW10, MDPTK15, Van15]. **colloids** [OOGP19]. **COLONEMA** [Car16]. **colony** [vRWS14]. **color** [HKK11]. **Columbus** [Pit12]. **combination** [LAG+17]. **combinations** [KCT15]. **Combinatorial** [BR14, DS13c]. **Combined** [BBB+15, BKS15, PEMS19, SCM14]. **Combining** [Laz15, SC16b, SKK17, GWF+16, KPST15]. **ComDMFT** [CSK+19]. **Comm** [AAT+20, Ano20, AZ17a, Ber16a, KYKN15a, LR16, Ras17, RC16, RHBH15a, SGM11a, Sco13, SIMGCP14, SJY20, YQM14]. **Comment** [BL18a, CCK23, Mel19, Maź19, MLK+19, Ram10]. **Comments** [San15, Hol19, MR13]. **common** [ATA+19, Bar11b, Laz15]. **Commun** [ERS10c, Kra18a, Nat10, ZTG14]. **communication** [DO14a, KP12b, RSSH+10, SCM13, TIM+16, WLZN17]. **Communications** [Ano16a, Maź19, MLK+19, Ram10, Wu10, Ano10a, Ano11b, Ano12a, Ano13a, Ano15a]. **communicator** [CBGY17]. **communicators** [YKK+19]. **communities** [IBKK11, Kra10]. **commutator** [BCT17]. **commutator-free** [BCT17]. **Compact** [Dua12, IKS19, LS19, MBGK11, BK16a, Cap13, DT10, FFT+14, HZ11, LLXK16, lLsSZ14, SR12, SA15b, SB11, TY10, Tia11, WZ13, XYK12, YTYA17, ZFH14, ZNT15]. **Compactly** [YKK+19]. **Comparative** [SS18, VEM12, JTN+11, LHSL14]. **Comparing** [SAN18, Gag12a, GHN19, GVR19]. **Comparison** [CM10b, CDBM16, Fuh15, LYJY10, WLM14, BR13, CDS13a, CHC+11, CS10, ER19, TBZ12, WG12]. **Comparisons** [ABH+19, CHZ18, DGPW11]. **ComPat** [LHB+19]. **compatibility** [BS13a]. **compatible** [BHJ+19]. **compensation** [AAJA14]. **competing** [BSWC14]. **Competition** [MS11]. **competitive** [Dan11]. **CompHep** [Sta10]. **compilation** [CW13]. **compile** [Vuk12]. **compile-time** [Vuk12]. **compiler** [LWC14, LW16]. **complement** [UKKB19]. **complementarity** [YSLY19]. **Complete** [FBG10, ACD+14b, Boy15, sL10]. **complex** [AQJ10, AC16, BGM+14, BH14b, BH16, BBF+13, BKM11, BH11, BDV11, Cai11, CHDF10, CdLOL19, CC10b, CC12, CGH+11, DDH17, EKK14, FGC+11, FHH+14, GCHL15, GYW+10, HLS12, HM18, JJ15, JMG+17, KS16a, KHZ+18, KCS+15, Lit13, LOV10, Maî12, MVI+16, MCNRC16, NMCR15, NLSJ17, Nov17, PHA18, PB16, SGW17, SA15b, Sol11, SOYHDD19, UIY11, UO15b, UO15a, VSG18, WZ13, WAHL13, ZMCT12, Zou18, BD14]. **complexation** [HB13]. **complexes** [Faw10]. **complexity**

[BHVMH15, YKS11]. **complicated** [AKR15]. **component** [Eba13, Erm18, HLS+17, TZM17, WLM14]. **components** [KCA+15]. **Composite** [ACMM19, CKLM10, KP14, Pra11, Vuk12]. **Composition** [HJ14, SOYHDD19]. **compositional** [FKS+19]. **compositions** [RH11]. **compounds** [BSWC14, DMC+15, LHWL16]. **comprehensive** [CEZ16, SAHP15, VBG+10, WJCZ18]. **compressed** [JL19]. **compressibility** [LWJV18, RH17]. **Compressible** [FDZ17, ACM12, BOGL17, HJGL18, HJGL19, PVK+17, SP18b, TFBW14, TCP13, VL19, XD16, YSLY19]. **Compressing** [HZC19]. **Compression** [BCC+18]. **Compressive** [HJL+14]. **comprising** [PDC14]. **compromise** [LGW13]. **Comput** [AAT+20, Ano20, AZ17a, Ber16a, ERS10c, KYKN15a, Kra18a, LR16, Nat10, Ras17, RC16, RHBH15a, SGM11a, Sco13, SIMGCP14, SJY20, YQM14, ZTG14]. **Computation** [ADH+17, AKH12, AD14, DLU18, DKOS14, Ihn12, JH15, LNP+17, Mil16, AM19, AB10, ACTP15, Bal19, BT17b, Cai11, CMN12, CNMC10a, Che17, CGRB14, CK12, DG10c, DADS11, Fuk17, Gao13a, GLS+13, GLAC13, GBP13, Gar19, GBD10, GST15, GST17, GA13, HR11, JC13, JC14, JZZ+19, JU17, KHBS19, KCN18, KZ11, KP12b, KvdO11, KMS19, Kol14, LPBH11, LV13, LM16, LLL12, LLL13, LAS+17, Mel19, MSS+14, NHSY15, PO14, RA13, RZ19, Sai13, Sch14b, SDL+16, USOA13, WWS10, WISA11, Wie13, YdDH+12, ZZ17a, Zou18, BCTP18]. **Computational** [ABB13, AL17, BBB+17a, BBC+13b, JAS17, MCGR11, NMS14, NFS15, RH11, SWS+12, WWR+16, YFAT17, ÁSS18, BHNS17, BCP+16, CL15a, Che11, CRC+13, Fri19, GBSY18, GBS+16a, HWCdM19, JOR+12, LFKD18, LHJ+15, LLX14a, MWI+19, MMC10, MCP10, Mül14c, NMCR15, NVAFO18, PSMS14, PSMS15, RK11, RBB15, RCD+10, Ros15, Sou14, WC15, ZTG13, ZTG14, dSVLP13, dSF18]. **Computationally** [WRBL19, DMC10]. **Computations** [Dan10a, Dan10b, BKS15, Bog16, Bre10, DS13c, GJ18a, GLW14, HKSW10, MKR+12, Naz12, NOR15, Wie15, YRR13, ZFZ19, dALM+12]. **compute** [BH11, Boy15, HHP+14, PB16, RLS16, RW11, SSG+10, SSG+18, TZM17, VB19, Wei11a, ZZSW19]. **computed** [FWS+17, MH18, SBvD13]. **Computer** [Ano16a, BRB12, FLW17, Gio18, JWJL12, Maź19, MSNI11, MLK+19, Ram10, Wu10, ABB+16, AG14, BJBC+14, BF16, BNV18, CDSG11, CYD11, CSK+19, Cip11, CK18, DJW+19, DS14, DSS+12, Dev12, GRTZ10, HHM+15, JuIAM16, Lit13, LO14, MLW+10, MSI+10, MNV13, MFS10b, MZE13, MSS+14, OYK+14, PCR17, DMH16, REtVH12, RtV16, iSSMI11, TJD11, Tab16, WR16, WSO+12, WEH+19, YKK+19, Zhe15, ZMPT13, Ano10a, Ano11b, Ano12a, Ano13a, Ano15a]. **Computer-aided** [FLW17, Zhe15]. **Computer-algebra** [Gio18]. **Computer-assisted** [BRB12]. **computer-generated** [MSS+14]. **computer-generated-hologram** [WSO+12]. **computers** [BWPT11, BKPT12, BY13, ILZ+19, IW15, LS12b, MNW+17, SOM+13]. **Computing** [ÁSTT16, ADF+15, BBC+11, Gio14a, LSG+12, RE19, TCP13, Vit19, Wai12, YE14a, ARAB+17, ARYT17, ABDR17, Ara14a, Ara14b,

BHW+12, CR13, CLC14, CKhN11, CSRV13, CL15b, ÇÖSÜ11, CRB+17, CNS+14, Dan10a, Dan10b, Dan11, DMC+15, DGST17, Ein16a, FBN+13, GXF+15, GLHR19, GST12, GHdF10, GCVA14a, GCVA14b, HCH16, JTP15, JVR12, KDP+14, KO14b, KO16, KK17, LR18a, LR18b, Lee18, LS17b, NFS15, PNL13, PG10, Qia10, SDS15, Sha13a, TKP15, TACA15, TGH+16, VPMVH+17, WX14, WGVPL17, YK18]. **CONAN** [LKT+16]. **concentrated** [BE14]. **concentrations** [Buc19, DMC+15]. **concept** [Vuk12]. **concise** [KKG+15]. **concurrency** [Dan11]. **Concurrent** [Hah16, HWT10]. **condensate** [VBMS17]. **condensates** [CCW10, GM14, Hoh14a, JWC13, JWL13, KLM+19, MT13, TZM17, WX11, WX14]. **condensation** [Ker17, LCCC11]. **condensed** [Jab17, MKB+11, ONS+15, SBH+14]. **condition** [PN15, STA18, SCNJ18, WLU11]. **Conditions** [KFF+16, KPPC13, BMHP17, CCHL11, DGG13, EY11, FJK+17, HSD17, JYPA18, Jiw15b, LWZ14, LLL12, LHWL16, LS13, MD11a, MRL18, MRVF13, Mil16, NPM16, PLCC12, Qia17, QHC+10, RC13, RC16, RHH12, RTA10, SP18a, SN16, Uty14, Wan16, Wil19, vdS13]. **conductance** [SPMM11]. **conductances** [TXZL15]. **conducting** [JPK+12, Qia16, RBG+19, SKML11]. **conduction** [CAN11, HWS16, MLS10, iSYS12, SN16]. **conduction-radiation** [CAN11]. **conductivity** [AWK+16, CKT17, FSH13, KST+14b]. **cone** [Hal17]. **Confidence** [Zlo14, SC14]. **Configuration** [Kra17, Kra18a, UFKB19, BSC+13, CF16, Gar19, GBSY18, KGG+16, KPST15, QZWU19, RE12, SAY+18]. **configurations** [BPS+16, CB13a, Gwi12, MCP+11, SKK11]. **confined** [LKT+16, MSRL10, RS12, RAV11, SGNL17, SNB11, SCM+16, vdS10]. **confinement** [Den10, GBJ+19, HJL+14, LLQX19, LHJ+15, LZ17, MJB+10, RV11, ZHCR18]. **conformal** [WWC+16, ZDWM17]. **conformational** [LOK+16, JKG+18]. **conformations** [CS16]. **conforming** [YWX11]. **Confronting** [BBH+10, BBH+11a, DDK+15]. **congruential** [SS13a, TC11a]. **conical** [DGST17, GST12, SPTPR19, DGST17]. **conjugate** [ÁSTT16, AG12a, EFK+19, HbotRC15, RE19]. **conjugated** [KS12, SS10a]. **Connecting** [Sht17]. **conquer** [PA13]. **conservation** [AAD14, Cha19, DJ11, HKJ+12, HHC+10, MMT+11, MWCY14, ZY19b]. **conservative** [BMBC+17, EW14a, KL17, LMRC15, LL19, UNK12]. **conserved** [Mar15, Nog17a, Nog17b]. **Conserving** [GHBL18, GHMB+19, AK15, CC14, CC15, DCC+10, GVPJ18, MTO15, Sok13, YXT+15, vSGB+18]. **Consideration** [WTH15]. **considerations** [WLU11, dSFdFF13]. **considering** [GLAC13]. **consist** [Faw10]. **consistency** [Sit18, SHNM11, SIMGCP13, SIMGCP14]. **Consistent** [MNC15, Buc19, CDTV10, CCGC13, DR12, Erm18, KOK17, NPVR14, Pit12, SEW12, SEW14, XNK+16]. **constant** [CLHL19, DT10, KA17, Moh14, SH12a]. **constants** [GPS+13, LSCZ11, Maź19, MLK+17, MLK+19, TW15, Voy13, WBY11, YZY10, ZC12]. **constrained** [BS15a, Mar15, NSXZ14]. **constraint** [WX14, YLK10].

constraints [AKK+18, NPAG11]. **construct** [Ray10]. **Constructing** [CSP+19, RU13, SOJ14, VSG18]. **Construction** [DIP11, ACMM19, ART17, FG13, GAGW16, OWS+14, RC11]. **Constructive** [HH11b]. **contact** [BG13a, CCLL18, EVB14, Gao13a, NFD+19, OL12, TTG11, dSdO12]. **contact-impact** [CCLL18]. **Containers** [GBC+18]. **containing** [Bot13]. **contaminated** [MW12]. **contamination** [PCEH15]. **context** [OLG+16]. **continuation** [CCW10, JWC13, KH19, KSW12, LLG17, TGUvS19, YOM+19]. **Continuous** [GMRHRCME13, GMPFC+14, GWF+11, GLW14, SGW17, BR13, Bis15, BVC13, CM10a, CXG+19, FGC+11, HWG13, HWM+15, Hua17, IW15, PBS+17, SKFP16, SLLP17, WRFS15, WLG+13, YWOD19]. **continuous-angle** [SLLP17]. **continuous-energy** [WRFS15]. **Continuous-time** [GWF+11, SGW17, HWG13, HWM+15, Hua17, IW15, PBS+17, SKFP16, YWOD19]. **continuum** [CL13, FM12, FZR19, GC12, HLS+17, KK13, MBF+10, MNPF17, NFA+16, NB17, PG10, SYE+18, TKL+12, WSTP15]. **continuum-scale** [HLS+17]. **contracted** [AC13]. **contraction** [DE13, PGO17]. **Contribution** [TW11, Pat12]. **control** [BM13, CAN11, CLL16, CB16a, FBHB17, FR15, HRC11, Hoh14a, KHK+11, KSW12, KSYY13, MS14, MLEM19, MD10b, MGFRG12, OK10, SH18, SJHS19, SCB17b, SCM+18, VPMVH+17, vWB10]. **control-variate** [KHK+11, MS14]. **controlled** [Exl17, HST+11, Pla16]. **Controlling** [LYX+17, CB15d, KSH14, PEMS19, RBG+19]. **convection** [FM15, GA10, GN14, GSKM15, GLW14, Kau13, SL14, Tia11, ZKG+18]. **convection-diffusion** [GN14, SL14, Tia11]. **conventional** [Kom15a, PE17]. **conventions** [SM13]. **Convergence** [Dua10, LV19, SMJ17, Sha18, ACC17, CB16b, HV15, HGCARM15, KV19, MBFB13, XHLUF+18]. **convergent** [HRC11]. **converging** [QLE16]. **conversion** [Hsu11b]. **Converting** [PDL+18, Hir15]. **convex** [LHGF18, LHG+19, RLL12]. **convex-roof** [RLL12]. **Convolution** [MCP+11, Bot11, Qia10]. **convolutional** [HZC19, LZZL10]. **convolutions** [HHP+14]. **COOL** [Bar11a, Bar12a]. **cooling** [Gre18]. **Cooperation** [QHC+10]. **Cooperative** [Dan11]. **coordinate** [BMNS14, FGLB12, HO13, LDR+17, OK14, RVDS16, RDVS18, SM13, SMC+17, SCG11, XGH+19, HSD17]. **coordinates** [AV13, BLAS19, DXY+19, GHMB+19, HF16, NKS15, PM16]. **coprocessor** [MSS+14]. **coprocessors** [SH16, SAN18, SBE+16]. **copy** [JPH+14]. **Core** [NBW16, ALC18, AZM14, ACTP15, BNAB11, CND11, ELDS14, Erm18, FLSZ13, FBN+13, GAC+17, GVS+15, HWT10, LHZ11, MW19, MNPY14, RCGT16, RB18, RJKC16, TRM+12, TDL+14, ZLZ19]. **core-collapse** [BNAB11]. **core-excitation** [GVS+15]. **core-level** [MNPY14]. **core-shell** [ACTP15]. **corr3p_tr** [EKO16]. **Correct** [WHB16]. **Corrected** [BPC13, Cip13, BGM+14, HWW12, HM17, JOR+12, KKSY18, SO19]. **correction** [FKL13, KK14a, KO14a, LYX+17, LLZ+17, Mar15, MSR10, SW13a, TAFD19, TZG12]. **corrections**

[ABdA15, AMRdA17, BBUY13, BCR14, HP17, LP15, Sta11, YW17, NJ18]. **corrector** [PAS11, PS14, SD10b, SA15b, TYH+15, Yua19]. **correlated** [APS+16, BKS15, CSK+19, DB13, HLL13, JDG12, KH11, MDF11, OOK+12, PZY16]. **correlated-electron** [CSK+19]. **correlation** [ARAB+17, CMVRB+14, CMSN18, DKG+14, KCL11, LAA+10, MHHL11, MOB12, PZL+19, QHZ+14, RMW13, RGKR17, WPD+15]. **Correlations** [DBB12, CLKK11, GTK+19a, KÓG17, MBGV15, RE19, iT11, WT12, YK12]. **correlators** [DE13, Nem16]. **correspondence** [GLX+14]. **corresponding** [GCVA14a]. **Corrigendum** [AAT+20, Ano20, AZ17a, Ber16a, KYKN15a, Kra18a, LR16, Ras17, RC16, RHBH15a, YQM14, ZTG14, Sco13]. **corrugation** [ZFBR11]. **CORSIKA** [BG14b]. **cosine** [Ert15, GH11, PH11, TK14b]. **cosine-screened** [GH11]. **cosmic** [HCRD14, LKW11, TS10, VDJ+11]. **Cosmo** [Asl14]. **Cosmological** [CMRVVR+14, ABB+19, Sai10, Wai12]. **cosmologies** [Arb12]. **cosmology** [Asl14]. **CosmoTransitions** [Wai12]. **Cost** [HJH17, ATA+19, KL14]. **Coulomb** [EUT+15, GH11, HK15, JH15, JZZ+19, LB13, MC16, Mil16, MSRL10, Nis11, PH11, RZ19, RGKR17, Sar17a, Sar17b, SHT18, SV13, XD13, XHD15, ZHPS10]. **Coulomb-distorted** [HK15]. **Counterexamples** [YE14a]. **counterterms** [SV12]. **Counting** [Kan18, Liu15a, GdGB+18, GES13, SBB13]. **COuntLOss** [Car16]. **COUP** [KKSY18]. **coupled** [AV13, BSM13, BK16a, CZS10, CZL+11, DT11a, DN13, DHJ13, Des16, DGMZ15, EEGW12, FBHB17, FCCTFR18, GMHZ19, GCVA14a, HWCH11, KGFS18, KP14, LWL12, MCA17, MZE13, PGO17, QSC14, SBL16, TK19, TPC16, WX14, YS17, ZMPT13]. **coupled-channel** [Des16, GCVA14a]. **coupled-cluster** [MCA17]. **coupled-wave** [CZL+11]. **Coupling** [DRI+16, KST14a, SCNJ18, BAK+15, BAK+16, BAK+17, CL14, FLSZ13, FHTO17, KA17, KVW11, LSK+14, MKL17, NGM+10, PMVG16, Pre18, Sch14a, SS12, TD17, WISA11, WX11, WNYP17, WLGY18, Wei99, YLL+19, ZCC19, Erm18]. **couplings** [AGH+16, AC16, KKSY18]. **covalent** [HXW+13]. **covariant** [BS12]. **cover** [Ano16m]. **Cowan** [Kra18a, Kra17]. **CP** [CRC+13, LCE+13, PS12, RCD+10, Ros15]. **CP-phases** [PS12]. **CP-violating** [CRC+13, RCD+10, Ros15]. **CPC** [Wei11a]. **CPMC** [NSXZ14]. **CPMC-Lab** [NSXZ14]. **CPPPO** [MGR16]. **CPsuperH2.3** [LCE+13]. **CPU** [BPP11, DCGG13, ELDS14, FBN+13, FOB+15, LSYZ12, Lya15, MDW16, MPM14, WC13]. **CPU/GPU** [LSYZ12]. **CPUs** [AEKO18, BS14a, ÓN12, RK19, SAN18]. **CR** [AANAJ12, BTM+17]. **CR-39** [AANAJ12]. **Crank** [BB10, CWS14]. **CrasyDSE** [HM12b]. **create** [KSTR15]. **creation** [DEW16, Krö19]. **criteria** [AG12a]. **criterion** [HFSK12, SK10]. **Critic** [dlRJL14]. **Critical** [CND11, CM10a, Fri10, OML11, XZF12]. **Cross** [CPW17, SJY18, SJY20, ALL+11, ASEA14, BPC12, BS13b, BHS15, CYD11, CFW17, Cip11, Cip13, CM14b, DHS14, DLM18, Gao13a, GLS+13, Kol14, Lit13, LWJV18, OILK17, PDL+18, SGAA18, Shi16, VC10, vdS13].

cross-machine [CFW17]. **Cross-platform** [CPW17, SJY18, SJY20, LWJV18]. **cross-section** [CYD11, CM14b, OILK17, vdS13]. **cross-sections** [Lit13]. **crossed** [BDGG19]. **crosswell** [CL15a]. **Crowd** [GK11]. **crowded** [BJ11]. **cruncher** [LKT+16]. **CRunDec** [HS18, SS12]. **crystal** [AZ17a, AZ17b, AFZ17, AFZ18, ATCZ19, Aza13, BP12, Bab14, BK13a, BBO19, FLA+16, FBP+14, HWCH11, HLTW19, KMJS16, LLSK17, Liu14, LZ18, LZ11a, LZ11b, LZ12, LOV10, MW14, OG14, OO15b, OO15a, Ste17, WS11a, WLZM12, WYH19, WBY11, YZY10, ZY19a, ZY19b, HBH+17]. **crystal-cutting** [KMJS16]. **crystalline** [AKZ+13, DBJ11, TKP12]. **crystallization** [AYDY11]. **crystals** [BBH11b, CLC14, Gen10, HXW+13, HLW16, KMJS16, LOK+16, NJS17, PYW+14, RDP14, Sin12b]. **CS** [War16]. **CSD** [CW13]. **CT** [LP15, YWOD19]. **CT-X** [YWOD19]. **CTF** [YLL+19]. **CTHYB** [SKFP16]. **Cu** [LS17a, TG11]. **Cuba** [Hah16]. **cube** [SPS18, CD12, MGO13]. **cubic** [Jiw15b, LD10b, LST15, Lin13, WZ13, WBY11, XZ12, YSN+14]. **cubic-quintic** [WZ13]. **Cucheb** [AKS17]. **CUDA** [BHS18, BTC+17, CB13a, CFF19, DM12, FWS+17, GRTZ10, HE13, HD11, JK10, KHBS19, KO14b, KO16, LBB+16, LYSS+16, LYZ13, MSML10, iSYS12, SKM15, WGG+19, WMRR17, WRMR19, WWFT11, YHL11, ZAFAM16]. **CUDA-based** [WGG+19]. **CUDA-enabled** [KHBS19]. **CUDA/MPI** [LYSS+16]. **CUDAEASY** [Sai10]. **CUGatesDensity** [LW13]. **Cummings** [KAvdL11]. **Cumulative** [AMR15, GST15]. **cuPentBatch** [GNP19]. **curation** [GVPJ18]. **current** [Fuk17, GBSY18, LYX+17, MTM14, VLL+17, YXT+15, ZDWM17]. **currents** [BL19, CPWZ18, HLS+17]. **Curvature** [KCN18]. **curve** [ERPDFLS15]. **curves** [Bog16]. **Curvilinear** [GSKM14, MGA+13, OCM+19]. **customisable** [BGL+14]. **customised** [KSTR15]. **customizable** [Giu19]. **customized** [DGG13, LYX+17]. **cut** [JvOK17, LCRL10]. **cut-cell** [JvOK17, NCB18]. **CutLang** [ÜS18]. **cutoff** [BL18a, SH12a, dJBIM16]. **cutting** [KMJS16]. **CWO** [SWS+12]. **cycle** [PZL+19]. **cycles** [GTSL+13]. **cyclokinetics** [ZW15]. **cyclotron** [BB13b, JGC+11, KMD12, PBL+18, SS11a]. **CYL** [GHMB+19]. **cylinders** [MCM+12]. **cylindrical** [BLAS19, GHMB+19, LKA+16, LJZ+18, XHD15]. **cylindrically** [RS12].

D [BL18a, JCL+18, LBP15, RPB+15, RHBH15a, TGH+16, WNYP17, WRBL19, AV13, AM19, AGMS15, APC+14, BBC+11, BBB17b, BAR12b, BVP10, CP15a, CPCDdM18, CC14, CdLOL19, DGG13, EW14a, FLZ+18, Fan19, FJK+17, FK12, FRFH10, GS15, Gai17, Gio14a, Giu19, GG16, GAB+16, GGF+13, GX15, GCVA14b, Gwi12, HKJ+12, HTT13, HTT14, HDM+12, Ixa10, JEC+12, JCL+18, JKIS16, KAK12, KL11, KO14b, KO16, KMJS16, LHJZ10, LHC+13, LX14, LKW11, MGL13, MGO13, MCP+11, NHD16, NCB18, PR10,

PCGM14, Qia17, RKVL14, RF15, RS12, RAV11, RJLL16, RHBH15b, SBH+14, SW14b, SP18a, SA15b, SKK11, SW11, TMA+15, TY10, TKL+12, TIM+16, TPC16, VMGP+19, VLM11, WNYP17, WMRR17, WRMR19, YKK+19, YLKN17, YTYA17, ZXL16, ZZD+16, ZSW+17a, ZFR18, SW14a]. **D-3V** [CC14]. **D-FFT** [YKK+19]. **D/** [JCL+18]. **Dalitz** [BGH+18]. **dam** [YS17]. **damage** [MBRV+13]. **damped** [DZ13, Eba13]. **damped-relaxation** [Eba13]. **damping** [MD11a, SS11a]. **DAMQT** [LRR+15, LRR+17]. **Darboux** [ADdM14, ACDdM15, ADdM15, ACDdM19]. **Dark** [GT19, AMR19, BBB+11, BBPS14, BBPS15, BHN+16, CCM12, HTY17, HCM19]. **DarkCapPy** [GT19]. **Darwin** [CC14, CC15]. **dash** [SCG11]. **Data** [BCJ+11, Car10a, DPK+15, KST+14b, XLCW14, AAA+16, Ano10n, Ano11a, Ano11o, Ano19m, BDKS10, BALV16, BG13a, BBV10, BMF+19, CL15a, Car10b, CZ18b, CMSV14, CSP+19, CZ19, CO11, DAW+19, DRUE12, DDK+15, DADS11, ECD+10, End11, Fer15, FCC15, FWS+17, GMRHRCME13, GTL+17, GVPJ18, GR19, GdGB+18, Gor19, HBP14, Hir15, JTH14, KFF+16, Kom15b, LLQX19, MW12, MGO13, MD10b, MM11, MGFRG12, MGR16, dlRL11, PCVZ11, PGO17, Ram19, RJW+19, RMW13, RSSH+10, SPTPR19, SEW12, SEW14, Shi16, Sin11, Sin12a, SAS11, SOJ14, SSM+17, TRM+12, TGUvS19, Var16, WMK11, YG12, ZSW+17a, Zlo14, dBCH14]. **data-assisted** [GTL+17]. **data-driven** [CZ18b]. **data-sharing** [TRM+12]. **Database** [RPB+15, BDT15, BBH+18, CYOS19, LL15]. **datasets** [CKT17, SHW18, WvSL13]. **Davey** [GML15]. **Davidson** [HLW16, ZHC16]. **DBpedia** [ZLLP17]. **DBSR_HF** [ZF16]. **dc** [CFSK14]. **DCDEM** [CCD+16]. **DD** [CDS+13b]. **DD-HMC** [CDS+13b]. **Dealing** [ACDdM19]. **dealloying** [ZDD+13]. **Decay** [APV10, Lev19, ADF+15, BGM+14, CDL+12, CLF18, GTPS19, Gin10, LMAB16]. **decays** [AC17, CGV13, CPWZ18, CCN17, DET12, DGPW11, ES16, EMW19, FEH11, HEF12, WT12]. **decimation** [US16]. **Decomposition** [ZYL+19, ASPW13, APC+14, BS15a, BS15b, CECGS16, CH11a, DO14a, DO14b, EDPZ19, GWF+16, JU17, JKIS16, KU10, LHWL16, MRL18, MCL+17, QL10, San15, ST19, SO19, TD14, WM13, WYH19, YKK+19, ZHC16]. **decompositions** [FRG12, GLHR19, SPS18]. **Decoupled** [ZKS+18]. **decoupling** [SS12]. **dedicated** [MH11, Pat12]. **deep** [WZHE18]. **DeePMD** [WZHE18]. **DeePMD-kit** [WZHE18]. **deexcitation** [RLS16]. **defect** [Buc19, DMC+15, HWW12, MBRV+13, NJ18, OO15b, OO15a]. **defects** [BMZ+18, CLC14, LZ18]. **defined** [ASPDL+16, Sza13a, WWS10]. **definition** [CNMC10b, DADS11, Vuk12]. **deflation** [NLSJ17]. **deformation** [RTÅT15, Wit14, ZC12]. **deformation-fluctuation** [ZC12]. **deformations** [Maź19, MAM14, MLK+17, MLK+19, OK14]. **deformed** [GC13, GC18, PSL+17, PUO14, SDM+12, SDS+17, SSK+13]. **Degasperis** [HDZ14]. **degenerate** [AAD13, AAT17, KGNS10, PFFK19]. **degenerated** [ABF19]. **degree** [BCDP18, Er14, TK14b, UNK12]. **Delaunay** [CHNS18, FLP10, GMH11]. **delay** [DS10, Fan19, LTP+17]. **delayed** [DDM14, JHJG14, LL15, ZTG13, ZTG14]. **delayed-choice** [DDM14].

delocalization [HW11]. **Delta** [SCM+18]. **Delta-plus-SPH** [SCM+18]. **demand** [CLH+17]. **dendrite** [ZKG+18]. **dendritic** [JEFP14, JK19]. **dense** [BMC+11b, CNS+18, MSZW11]. **densities** [BR14, Gio14a, GZW17, SHZ13]. **Density** [GS17a, NJS17, VCMS+13, ASA18, AKZ+13, AG14, AM10, AM11, AM17, BL19, BBH11b, BCH17, BR13, BSGG10, CDTV10, CXH+15, DSM+11, Dua12, FTI18, FLE19, GWL+17, GBR+14, GJ18a, Gio14a, GCP+15, HYM11, HHS+10, JCW+13, KT12, KCT15, KK16b, KKL+18, KBSP19, KSYY13, Liu15a, LW13, LS11, LRR+15, LRR+17, MGRB11, MOB12, MSS+16, Mil16, MNPY14, MC17, NPAD11, NBN+14, OOK+12, OT11, QJF16, RHC15, RCH16, RCH19, RGH10, RWKS15, SH12a, SCRS17, SSX14, SBH+12, SAHP15, SA14, TVGB15, VBS+17, VSG18, VvAV+11b, VvAV+11a, WLGY18, Wit14, WPAV14, XLL15, XNK+16, YKK+19, YLYL17, YRR13, BC10, DBB12, GS17b, LT15]. **density-based** [SSX14]. **density-functional** [GBR+14, MGRB11, MC17, SCRS17, SA14, TVGB15]. **DensToolKit** [SAHP15]. **dependence** [Maź19, MLK+17, MLK+19]. **dependencies** [Kan14]. **Dependent** [LB10b, BBB17b, BMBC+17, CFCB12, CVK+17, DS13a, DHR14, DM12, FGLB12, GWL+17, GS15, GBR+14, GTG+11, HST+11, HM18, IBB18, Ixa12, JL19, Kap16, Ker17, KBSP19, KTA12, KYSV+15, LV14, LBB+16, LYSS+16, MC16, MGRB11, MGL16, MC17, NPM16, ÓN12, PR13, PM16, RVDS16, RDVS18, SSB+16, SHZ13, SSH+13, SLC11, SBH+12, SCB17b, Ste17, TC11b, TVGB15, TT11, UW12, VBS+17, VVB+12, WL11b, XJS16, YSVM+16, YSMA+17, ZHCR18, ZYZ15, ZKS13, dSF18, vH18]. **depending** [EY11]. **depinning** [SLZ16]. **deployment** [HKK11]. **deposit** [YXT+15, Lit13, LO14]. **deposition** [BT17a, RH11, VLL+17, ZLFM11]. **Derivation** [CWS14, ZFZ19, BENK+17, HB12, Miy15]. **derivations** [ZZ17a]. **derivative** [RVA14, SK10, SAHP15]. **derivatives** [BDJS18, GCVA14b, KTB17, KCA+15, LWZ14, MDHD18, NS15, PB16, WWS10, dTOV18]. **describing** [ÁSTT16, BDKS10, HJ14]. **Description** [ÜS18, DCM+12, DPK+15, DOP17, DSLP11, MNC15, TKP15]. **Design** [CFCB12, Fri14b, Dan12, LOK+16, ML14, NFA+16, NVAFO18, TUY15, SAA+10]. **Designed** [UO15a, DLW+18, MCAdF14]. **Designed-walk** [UO15a]. **DESOLVII** [VJC12]. **detail** [OK10]. **Detailed** [HWW12, MPSV15, Str15, VV16, BTC+17, CFFR15, LCC13, dSF18]. **Details** [JG16, GHBL18]. **detect** [RMC16]. **detecting** [DBJ11]. **Detection** [Ber14, AKKK16, BLS17, BHH+10, BBH+15, BMG+15, HTY17, KME+11, LTP+17, NDSH18, OL12, ZBMM11]. **detector** [AANAJ12, BPMM14, BKM11, PCEH15, TdAdSS11]. **detectors** [JuIAM16]. **determinantal** [Zou18]. **determinants** [USOA13]. **determination** [BR13, BHVMH15, JK13, JMG+17, KKCC19, MD10b, SBB+17, Ver16, VvAV+11b, WG16a]. **determinations** [BCH17]. **determine** [BG19b, BMF+19, BSWC14, MD19]. **determined** [Buc19, RU13]. **Determining** [ACDdM14, VdLF14, MC10]. **Deterministic** [UO15b, ALC18, Asi10, BL18b, GJLB12, TZG12, ZTG13, ZTG14].

deterministic/stochastic [GJLB12]. **detonations** [MTE17]. **detuning** [CdFDS16]. **Development** [Dan10a, Dan10b, GdGB+18, HF16, HCHW11, KYKN15a, KYKN15b, KKO19, LHH+12b, OILK17, QLN14, SCLW16, SYD17, Sit14a, Sit14b, SHL+11, YLKN17, YS17, ZKG+18, BBB+19, DBMR18, Gio14b, HvAS+13, HVMR10, HKVR10, RK11, Sch18, Uty14]. **developments** [GJA+16, LOSZ13, SAW18, SMO16a]. **deviates** [AM14a]. **device** [CDSG11]. **devices** [ASGLK10, AK15, AGB+15, BKA+14, HEF+11, KRK16, KPK+17, LLQX19, NAQ16, SO19, WWC+16]. **devoted** [Org15]. **DeWitt** [SMdONF14]. **DF** [LAA+10]. **DFMDEF18** [GC18]. **DFMSPH14** [GC16]. **DFMSPH19** [GCK19]. **DFT** [BFD+11, DSW+15a, DO14b, HM17, KST14a, LM19, SW13a, VCMS+13]. **DFT-calculations** [VCMS+13]. **DFT/LDA** [SW13a]. **dftatom** [CPV13]. **DFTB** [IIO16, LM19]. **DFTBaby** [HM17]. **DFTTools** [APS+16]. **DG** [FDZ17, dlRM18]. **DG/FV** [dlRM18]. **DGLAP** [War16]. **DGLAP-CS** [War16]. **diagnostic** [MTM14]. **diagnostics** [BRL12, MGA+13]. **diagonal** [IH11]. **Diagonalisation** [MKV11, OILK17]. **Diagonalization** [NLSJ17, CL10, ID18, SA15a, SH12b, SH16, TC12]. **Diagonalizing** [Chr18]. **diagram** [BDGG19, GBP13, Liu15b, MS11, XWhZ13, XW15, dALM+12]. **diagrams** [ADT+19, BLS17, Ell17b, YdDH+12]. **dialog** [Zlo13]. **diameter** [SBB+17]. **diamond** [Aza13, ZFBR11]. **diamond-structure** [Aza13]. **DIAPHANE** [RDC+18]. **diatomic** [Faw10, Kob13, PZY16, TC11b, YLTS16, ZYZ15]. **dichroic** [PBMAD12]. **dichroism** [DA16]. **Dielectric** [MCP10, CHC+11, KSH11, MSR+17, Ser10, TMD11]. **diesel** [ZLFM11]. **diff** [TACA15]. **Difference** [Wil19, AAD13, ACTP15, BMNS14, CW16, DT10, DM17, DJ12, DSPJ10, FNPMB10, GS17b, GS17a, GA10, GB14, GMHZ19, HE13, Hsu11b, HZ11, JK19, JLM18, Kob13, LD10a, LV15, LLXK16, LYX+17, MSS+16, MBFD12, ICD13, ÓN14, OWS+14, Ram14, RC13, RC16, SP16, TT14, Ter17, TMA+15, TYH+15, TCP13, VLPPM14, VDB14, VV16, WZ13, Wit14, XYK12, YXT+15, YTYA17, YQM12, YQM14, MCM+12]. **difference-collocation** [LD10a]. **difference-FFT** [YXT+15]. **difference/Hermite** [GMHZ19]. **differences** [PVK+17, SCG11, UA17]. **differencing** [PTMDPK14]. **different** [BEKP19, CDS13a, DN13, EMW19, GVR19, MJB11, TRM+12, XLX+15]. **DIfferential** [BKK13, BKM14, BK15, BK16b, DSW15b, PTS12, APV10, ADdM12a, ADdM14, ACDdM15, ADdM15, ACDdM19, CJJ+17, DHJ13, DdMN16, DGST17, DSP15, FSJ+16, FBHB17, FF11, GJ14, GM17, GCVA14b, HJ14, IH11, Jan10, JK10, JC13, JC14, JPM12, Jiw15b, KD17, KBSP12, Kra10, Lev19, LLL12, LLL13, sL10, MJB+10, MZE13, NO12, Ras09, Ras17, RBB15, VBC+12, VJC12, WYSW10, WT15]. **differentiate** [Gio18]. **differentiation** [CL15a, CD15, Cha16, Gio18, GHR+16, HAV+14, Ram19, SF10, VKS16, YB13, vH10]. **differentiator** [LZZL10]. **difficult** [ACDdM19]. **diffraction** [FNPMB10, GTL+17, MSPD12, SLW19a, SLW19b, WG16a, WS11a].

diffractive [FNPMB10]. **diffuse** [Gri10, XD13, XHD15]. **diffusion** [BMW14, BO12, CYN19, CATK11, CB15b, CMdB11, CM14a, DMP18, DJ12, EZL+16, FZR19, GA10, GN14, HJ14, HZ11, LRSS19, MBRV+13, MFM15, MS11, Pla16, SGAA18, SO19, SCM14, SL14, Tau10, Tia11, WXW14, WFV14, XWF18, YQM12, YQM14, ZSW+17b, dSF18, dTOV18, BR11, KdMvO14, MNPF17]. **diffusion-controlled** [Pla16]. **diffusion-convection** [GA10]. **Diffusion-Limited** [KdMvO14]. **diffusion-wave** [HZ11]. **diffusive** [ACMM10, ACML11, ACM12, WJHW14]. **digital** [JTP15, DMH16, ZSW+17a]. **DigitalMicrograph** [SLW19a]. **digitized** [KME+11]. **dilute** [WZS+11]. **diluted** [SFP11]. **dim** [GMF+17]. **dimension** [ADdM+12b, BNAB11, Ein16a, EGPS10, GFB+10, GGF+13, JWC18, LXR+18, LKT+16, RU13]. **dimensional** [AG14, ASS13, AH13, BT17a, BDP16, BC11, CZD15, Cap13, CAN11, CZ18b, CS16, CJH11, CLJ12, CC15, CW16, CHC+11, CC10b, CC12, CR12, CvW12a, CvW12b, CHZ18, Dan14, Dan16, Dan17, Dan19, DG10b, DS11b, DM17, DS13c, Dua10, DO14a, DO14b, FFT+14, Fen12b, dAFdSVM12, Fil13, GTPWL12, HHC+10, HLW16, HLTW19, HCSW10, JEFP14, JWCW17, JPM12, Kap12b, KHB14, KS16a, KKP11, KP12b, KYKN15a, KYKN15b, KH12, KO12, KO13, KS12, KRB15, KKO19, KMA+12, LJSW11, LLSK17, LWL12, LST15, LLXK16, LCQF18, LHH+12b, LJZ+18, LLX14b, LR13, LR16, MHWH19, MEM+11, MKR+12, MSZW11, MNPF17, Mül14a, Naz12, NAQ16, PBE14, QA13a, Qia16, QLE16, QSB19, RtV16, Rei11, Rei12, RHC15, RCH16, RCH19, RGKR17, RWKS15, SFP11, SÓÓN11, SCLW16, SLR16, SDJ+12, SJW10, TD14, TT14, VK14, WC10, WWC+16]. **dimensional** [WvSL13, XZF12, XZ12, YWX11, ZFH14, ZYZ15, dlHV12, dTOV18, vRWS14]. **dimensionality** [BH17]. **dimensions** [BDDM18, Chr18, DMC10, DKOS14, Exl17, KAvdL11, LA13, MÅWK18, TSIM16, dSdO12]. **dimer** [Ots11]. **diminishing** [MKU+12]. **diodes** [YSN+14]. **dipolar** [KYSV+15, LBB+16, LYSS+16, MLEM19, TZM17]. **dipole** [HMU10, HRC11, RE12, SGDS16, Tan19, TU14, vWB10]. **dipole-dipole** [Tan19]. **Dirac** [MN16, MFS10b, AL17, BB15, BW12b, BBF+10, CPV13, FGLB12, HP14, KCT15, PB16, STK10, SFV19, SP16, Sta13, TKS10, TKS19, ZF16, dlHV10]. **DiracSolver** [TKS19]. **Direct** [LLZ+17, SKH+10, Wei11a, BCM+16, CDS13a, GJ13, LOK+16, LSK+13, ML16, OP12, SKK+19, WBS+18, WAW14]. **direct-drive** [SKK+19]. **Direct-MPI** [WAW14]. **direct-sum** [GJ13]. **directed** [FLP10, QHC+10, dSLF13]. **direction** [LST15, LSK+13, MRL18, NO14, TT14, XYK12, XZ12]. **directional** [TKJ19]. **directions** [Hal17]. **directive** [BCG+15]. **directive-based** [BCG+15]. **directly** [Kon11, Sco13]. **DIRHB** [NPVR14]. **Dirichlet** [RC16, HSD17, Jiw15b, RC13, RHH12]. **disaggregation** [Bis15]. **disc** [Lan13]. **discharge** [CHC+11, LHH+12a, UBRT10]. **discharges** [FK12, HCHW11, KRB15, KSYY13, MRL18, SVG10, SBL16]. **disciplinary**

[WSH+12]. **Disconnected** [BWWM19, ACD+14a, BCS10]. **discontinuities** [DR12]. **Discontinuous** [SVS19, EW14a, Ein16a, HLLH16, HWS16, LLP15, LLMW17, Maz13, QWZW18, WP10b, YWX11]. **discovery** [LCRL10]. **discrepancy** [VLD+12]. **Discrete** [CR12, EW16, ZXZ+19, AGMS15, ELDS14, GMRHRCME13, GMPFC+14, GJHF14, KV10b, Law19, LCH11, LYL+17, MD10a, NMS14, RTÅT15, SL17, SWL+15, Sza13b, Sza13a, Sza16, ZAHA10, EW14b, EEGW12]. **discrete-dopant** [LCH11]. **discrete-element** [RTÅT15]. **discrete-time** [GJHF14]. **discretization** [CDBM16, DM17, DJ12, MLS10]. **discretized** [HLLH16, JYPA18, LHC+13]. **discrimination** [sL10]. **discussion** [Nem16]. **disks** [TACA15]. **dislocation** [DZ15, MTS+16, Pei18, ZLZ19]. **dislocation-simulation** [Pei18]. **dislocations** [PE17]. **Disorder** [CZGC19, ABCM14, TKP12]. **Disorder-based** [CZGC19]. **disordered** [CLJ12, CRNK12, CZN14, Dan10a, Dan10b, JA17, LZL11]. **disperse** [Sie16]. **dispersion** [BSK+18, FMW10, JL10, Kon11, LKA+16, MFH+13, PSB11, PSBT12, RE19, Sco13, SB11, sX14, vMB14]. **dispersion-free** [LKA+16]. **dispersions** [ZZSW19, ZZ17b]. **dispersive** [CW16, GAO13b, HLW16, Ram10, Ram12, Ram14, WWHW14]. **displaced** [BGHN19]. **displacement** [EDPZ19, UW12]. **displacements** [LS15b]. **dissemination** [LHC+12]. **dissipation** [Fu19a, PDJ10]. **Dissipative** [JBKM15, ASPW13, BTL+17, CCWL11, FDZ17, GAHP15, GTS14, MDPTTC17, MNC15, TK14a, TKJ19, TD17, WXW13, WXW14, YLQ+17, BJM15, LBM+14, MDPTK15]. **dissolution** [XHLM12]. **DIST** [Pei18]. **distance** [PDC14, RK19]. **distances** [Raw15]. **distant** [Ste17]. **distant-dependent** [Ste17]. **Distinct** [Cro16]. **distorted** [Bad11, GRLS18, HK15]. **Distributed** [GHdF10, AM14a, BKS15, CL15b, GB11, GBS+16a, IW15, MV11, OLG+16, SOJ14, WMK11, WC13, WAW14, YG12, RPB+15]. **distributing** [HWT10]. **Distribution** [CGO17, AMR15, Ber14, BDBV12, CMR17, DCC+10, DSM+11, DRR15, FSF11, FP14, FCC15, Fuk17, GST15, HEF+11, wHwH11, LSF14, LSDD14, LN16, MST+18, PN15, PM13, Ram10, SLW19b, SS11a, SSP16, VKLM11, Yan09]. **distributions** [BT17b, BMF+19, ECSH16, PDC14, Pos18, VSG18, WCT11]. **districting** [Cho11]. **Disturbance** [HJGL18, HJGL19]. **divergent** [Fen12b, dDYK+18]. **diverging** [LNP+17]. **diverse** [JKG+18]. **divide** [PA13]. **divide-and-conquer** [PA13]. **division** [MÅWK18]. **DMRG** [Alv12, WPD+15]. **DMTDHF** [ZYZ15]. **DNA** [BSC+13, DPK+15, KSH11, MVI+16, Sva12]. **DNA-radiation** [BSC+13]. **DNAD** [YB13]. **DnaFabric** [MVI+16]. **DNS** [APC+14]. **DNSLab** [VK16]. **docking** [BGHN19]. **documentation** [DNP+12, DPW16, KLV15]. **doing** [GLMG12]. **Domain** [BS15a, IBP+15, ASPW13, APC+14, BS15b, BNO17, CKSM+19, CW16, DO14b, EDPZ19, FRG12, FNPMB10, HJH17, HE13, HC16, HC17, HKvH16, Hsu11b, JLM18, JU17, Kap12b, LLQX19, MRL18, MBFD12, ICD13,

MCL+17, Oti13, QL10, Ram14, SGM18, SVV19, SO19, SW12b, TD14, TT14, VDB14, WYH19, ZLL13, ZHC16, HKF+12, MCM+12, Wil19].
domain-decomposition [MRL18]. **domains**
[Bot13, DS13a, GMHZ19, JYPA18, KSW12, OOK+12, SNB11, SK15].
dominated [Kau13]. **dopant** [LCH11, SD14]. **doped**
[KAR+15, NS11b, SQL+10]. **Doppler** [MGA+13]. **Dose** [RMS+12].
dosimetry [ACdS13]. **dot** [BMNS14, CL10, KPK+17, YÇÖ15, ZHC16]. **dots**
[Den10, GWL+17]. **double**
[CWW10, GC10, GC13, GC16, GC18, GCK19, MD10a, Ram14, TTG11].
double-dispersive [Ram14]. **Doublet** [Ore19, ERS10c, ERS10a, ERS10b].
doubling [CL15b, FGLB12]. **Doubly** [GH11, SEW12, SEW14, WW13].
DPD [MDPTK15, PTMDPK14, SH12a]. **DPM** [RB18]. **Dr** [OTC14]. **DRA**
[LM16]. **drag** [RC15]. **drainage** [GTSL+13]. **DRED** [SV12]. **DREG** [SV12].
Drift [DOP17, CEP18, DJ12, Evs14, SISW10, SO19, XYM+13].
Drift-Asymptotic [DOP17]. **drift-diffusion** [DJ12]. **drift-kinetic**
[CEP18, Evs14, SISW10]. **drive** [MTM14, SKK+19]. **Driven**
[Dan10a, Dan10b, BJBC+14, CZ18b, CHC+11, De 11, GTL11, GAB+16,
Hin11, HJL+14, IBKK11, LDW13, LHJ+15, MiH12, MS11, RHHF12,
RTT+18, VPM12]. **driving** [BNAB11, THDH14]. **droplet**
[MLEM19, Tom16]. **droplets** [APC+14]. **drosophila** [SLC11]. **Drude**
[HLW16]. **DSAM** [SLLP17]. **dsDNA** [AGVP10]. **DSMC**
[JvOK17, OCF10, TKL+12]. **dsmcFoam** [WBS+18]. **Dual**
[Gar19, CBGY17, DG10a, LCQF18, VvAV+11b, YB13]. **dual-level**
[LCQF18]. **DualSPHysics** [CDR+15, VDA+19]. **duct** [ZNT15]. **due**
[Cip13, Eme11, TW11, XYM+13]. **dugksFoam** [ZCG17]. **Duguet** [CCK23].
Duo [YLTS16]. **duplicate** [LZ12]. **during**
[Gai17, GTSL+13, XLX+15, YK18, ZBMM11]. **dust** [HCRD14]. **DVCI**
[Gar19]. **Dyck** [Brá15]. **dye** [HG13]. **Dynamic**
[ALS16, Bar12a, DSHS17, FRG12, SJ17, SUS+17a, SKSK13, AGMS15,
Bar11a, BS15b, CD12, DF11a, DGMZ15, EDPZ19, HST+11, JFHA19,
JOR+12, Krö19, KHN19, PE15, Sus17b, Sva12]. **Dynamical**
[KLKR11, LLHC11, AG14, ADdM+12b, ACDdM14, BVC13, BG11, CZ18b,
CZ19, Dan11, DT11b, Er14, GTK+19a, KP12a, KS19, KI11, LS16, LMAB16,
MW19, TTS11, WHG+19, Wie18]. **dynamically** [CFCB12]. **Dynamics**
[AS16, AD15, DRR15, wHwH11, JBKM15, MDPTK15, Ngu17, NLB+19,
SBPN15, TD17, WWR+16, ADD+11, ASPW13, ABB13, BS14b, Bar11a,
Bar12a, BHS18, BBB+19, BPML12, Bin13, BTL+17, BG14a, BVSG19,
BWPT11, BKPT12, BY13, BCG+15, BBV+16, BMDP19, BENK+17, CTT17,
CMM14, CLLK11, CXH+15, CKS10, CH11b, DCM+12, Dat13, DLGP10,
DEW16, DT11b, DHR14, DS13b, ENEO15, ER19, ESM17, FSH13, FCVH17,
FRG12, Fil14, FJ19, Fu19b, FFIH11, GK11, GM11, Gio14b, GLR17,
GNA+15, GAHP15, GTS14, GH15, HWCdM19, Has11, HST+11, HL19a,
HRC11, HG13, HYM11, HXW+13, HLZ+13, HPN18, HBH+17, HWL+17,
HM10, HM17, HDM+12, JWL13, JPH+14, JNN12, JNN13, JSLM16, JKIS16,

KST14a, KKCC19, KPA+19, KDM11, Kon11, KK17, KKO19, KS15, KCS+15, KR14, KHN19, KSY17, LGW13, Leó12, LS12b, LHZ11]. **dynamics** [LK15, LLZ+17, LBR+18, LSK+14, LDF+16, LS17a, MDW16, MIW+13, MDPTTC17, MM17, MTSI11, Miu11, MNC15, MKB+11, MSH11, NBM+15, NBW16, NPAG11, NP19, iNSK+15, ÖKC11, OKM12, OYK+14, PR14, PLCC12, QL10, QLE16, RC15, Rap11, RFSF18, RBB15, SV14, SGM18, SBH+14, SL17, SH18, Sco13, SCRS17, SOM+13, SMO16b, SKM15, SYE+18, SAG13, SJY18, SJY20, TM19, TK14a, TZM17, Tan19, TSTT13, TL19, TS11, WJCZ18, WC10, WX11, WXW13, WXW14, WZHE18, WSI13, WSH+14, XQ19, YW17, YHCS11, YLQ+17, YK12, Zag14, ZZHG18, ZS13, Zhe15, ZPvR16, BJM15, BHND16, DLGP10, LBM+14]. **dynamics-based** [ZS13, Zhe15]. **DynaPhoPy** [CTT17]. **Dyson** [HB12, HM12b, SAW18].

e-infrastructures [GBS+16a]. **e-Science** [LSJ13, CKhN11]. **E6Tensors** [Dep17]. **early** [SCW+11]. **Earth** [MPS13]. **Easy** [DEW16, Sou14]. **EasyFeynDiag** [XW15]. **EBT2** [ACdS13]. **EC** [MTM14]. **ECE** [MTM14]. **ECOM** [LC15]. **ECPSSR** [BPC12, Cip11]. **ECR** [MTM14]. **ecs** [BH16]. **ECsim** [GHBL18, GHMB+19]. **ECsim-CYL** [GHMB+19]. **eddy** [MRL19, TIMM13]. **edge** [BMU11, CCLL18, FRFH10, FR15, LDR+17, SCB+17a, SPY11, ZDWM17, ZFR18]. **edge-based** [CCLL18]. **Editor** [Sco13]. **Editorial** [Ano18e, Ano18i, Ano18j, Sco16, Ano10b, Ano10c, Ano10d, Ano10e, Ano10f, Ano10g, Ano10h, Ano10i, Ano10j, Ano10k, Ano10l, Ano10m, Ano11c, Ano11d, Ano11e, Ano11f, Ano11g, Ano11h, Ano11i, Ano11j, Ano11k, Ano11l, Ano11m, Ano11n, Ano12b, Ano12c, Ano12d, Ano12e, Ano12f, Ano12g, Ano12h, Ano12i, Ano12j, Ano12k, Ano12l, Ano12m, Ano13b, Ano13c, Ano13d, Ano13e, Ano13f, Ano13g, Ano13h, Ano13i, Ano13j, Ano13k, Ano13l, Ano14a, Ano14b, Ano14c, Ano14d, Ano15b, Ano15c, Ano15d, Ano15e, Ano15f, Ano15g, Ano15h, Ano15i, Ano15j, Ano15k, Ano15l, Ano15m, Ano16b, Ano16c, Ano16d, Ano16e, Ano16f, Ano16g, Ano16h, Ano16i, Ano16j, Ano16k, Ano16l, Ano17a, Ano17b, Ano17c, Ano17d, Ano17e, Ano17f, Ano17g, Ano17h, Ano17i, Ano17j]. **Editorial** [Ano17k, Ano17l, Ano18a, Ano18b, Ano18c, Ano18d, Ano18f, Ano18g, Ano18h, Ano18k, Ano18l, Ano19b, Ano19c, Ano19d, Ano19e, Ano19f, Ano19g, Ano19h, Ano19i, Ano19j, Ano19k, Ano19l]. **Editors** [Ano10a, Ano11b, Ano12a, Ano13a, Ano15a, Ano16a]. **EDRIXS** [WFDK19]. **education** [LPBH11, Mül14c, TN11]. **Edwards** [FFT+14, SJ17]. **EERAD3** [GGGH14]. **ef** [DIP11]. **ef-based** [DIP11]. **Effect** [CHH+11, KSH11, SBL16, AG14, CFSK14, Kri12, OCL+13, QHZ+14, SWL11, SDJ+12, WBY11, XGH+19]. **Effective** [BCS10, VLD+12, CLC14, CM15, CGG+14, Cri18, Erm18, GR19, HHC16, IKS19, Jab12, LSG+12, Nem16, NRSVW12, ZTG13, ZTG14]. **effective-mass** [HHC16]. **effectiveness** [SS18]. **Effects** [iT11, BDK11, DGMZ15, GTSL+13, GB14, KZ11, KS16b, KKS18, LHSL14, Liu15a, MDPTK15, NLB+19, OOGP19, PBE14, VV16, WT12, dSVLP13].

Efficacy [DML+16]. **Efficiencies** [AMJ18]. **Efficiency** [LV15, WG11, ZPvR16, AKK+18, FZ16, GLAC13, GSKM15, JAS17, KK17, LCRL10, VKS16, WW12]. **Efficient** [AS11b, AAT17, BCJW13, CMN12, CZ18b, CSRV13, FUSH14, FCVH17, GBP13, GST17, GGG16, GVS+15, GA13, HWG13, HXW+13, HAN+16, HPN18, HCH16, JU17, JMG+17, KA17, Krö19, LDD+19, LHZ11, LAG+17, sLqSqL+13, MA11, MSRL10, NVAFO18, Qia16, QZ19, RA13, RF15, RZ19, SZ15, SHNM11, SOYHDD19, SCM14, SA14, THDS16, USOA13, VDF15, VBS+17, Wal11, WS11a, WLH+12, WT12, Wil15, WWFT11, WAW14, WMI19, XYZX19, YZ19, ZY19a, vRWS14, ARAB+17, ASPW13, AMM11, AGH+16, AL17, ACTP15, BJCW13, BBB+19, BB13b, BHW+12, CZZ+19, CSP+19, CSV+18, CLB11, DCC+10, DKSG16, DMC10, DG16, FVH18, FLW17, FHTO17, Gar19, GS17b, GS17a, GMHZ19, GJ18b, HJH17, HBP+15, HLTW19, JCL+18, JKIS16, Koh15, KBSP19, LM19, LK12, LYJH19, Leó12, LHJ+15, LKPH19, LW11, Lya15, MFG+13, MGR16, MCNRC16, NPAD11]. **efficient** [Nik12b, OK14, PMS+17, PM16, PS11, Pos19, QLN14, RLM13, RJKC16, SW13a, ST19, SR12, Shi16, SK14, SPP19, TSIM16, TZM17, VdLF14, VLL+17, WWS10, Wan10a, WX11, WZ13, WLGY18, WDR16, YWOD19, Zou18, dBCH14]. **efficiently** [MHWH19, RTT+18, SZC+13]. **EFT** [GBD10]. **eHDECAY** [CGG+14]. **eigen** [CHDCJA17]. **eigen-stress** [CHDCJA17]. **eigenfunctions** [BAF18, GCVA14b, MGL13]. **eigenmodes** [HSK+12, TJH17]. **eigenproblems** [DBB12, RLM13]. **eigensolution** [FZ16]. **eigensolver** [GBP13, GAO13b, HLTW19, SAY+18]. **eigensolvers** [DB13, LT15, VBS+17]. **eigenstates** [RPL+14]. **eigenvalue** [BMU11, CDMCN11, DB13, DPB16, DS15, GHvdL11, HKSW10, Ixa10, JWM+18, LR13, LR16, MKR+12]. **eigenvalues** [BW12b, DKOS14, GCVA14b, HLW16, JZJ18, NJ18]. **eigenvectors** [JZJ18]. **eight** [PAS11, PS14]. **eight-step** [PAS11, PS14]. **eigSUMR** [CL16]. **Einstein** [ARYT17, CCW10, GM14, Hoh14a, JWC13, JWL13, KLM+19, LCCC11, MT13, TZM17, VBMS17, WX11, WX14]. **Einstein-** [ARYT17]. **EIRENE** [SK12]. **Eisenbud** [RA13]. **EKHARA** [CI11, CK19]. **ElAM** [MLW+10]. **elastic** [ASEA14, AFIS12, CKSM+19, CHDCJA17, CGJ14, DMC10, GPS+13, Gri10, Jab17, Kas14, KGFS18, LSCZ11, MLW+10, Maź19, MLK+17, MLK+19, QDZ+13, TH17, TW15, Voy13, WBY11, YZY10, ZC12, ZZ17a, GPS+13]. **elasticity** [MBF+10]. **Elastodynamic** [MAIVAH14]. **ElecSus** [KAH18, ZKW+15]. **Electric** [OCL+13, RE12, CFSK14, GBSY18, JTN+11, JPK+12, LXR+18, MRL18, SCNJ18, ZKW+15, ZDWM17]. **electrical** [CKT17]. **electrically** [HC16, Ram12]. **electro** [PGO17, Wie18]. **electro-dynamical** [Wie18]. **electro-mechanics** [PGO17]. **electrodes** [OBH10]. **Electrodynamics** [HBS+11, GH15]. **electrolyte** [Mar19]. **electromagnetic** [AHK+12, CC14, CC15, CSJ+17, CZF18, Fuk17, GLAC13, GMC18, GH15, GCHL15, JLM18, KOT12, KC14, KTE+12, LPRPR17, LHJZ10, LHC+13, LL19, LF12, MIW+13, MKU+12, MCM+12, ORI+10,

Oti13, OVSI15, PP13, PYW+14, Ram10, Ram14, SKK17, Sør19, SDL+16, TM19, VV18, WGG16, WGG+19, WN10, ZHSL13]. **electromagnetically** [WL11b]. **electromagnetics** [QWZW18]. **electromechanical** [SWL11]. **electromigrative** [DSK19]. **Electron** [DSM+11, FP14, PB13, PMVG16, YSN+14, AKZ+13, ART17, ACTP15, AG12b, BH16, BH17, BMW14, BSGG10, CYD11, CL11, CSK+19, CGRB14, CRB+17, DCC+10, Dua12, FYK18, FUSH14, Gai17, GGGH14, GH11, Hoh14b, Ihn12, IUM13, ID18, JA17, JGAL+13, JH15, KEH12, KK14a, KCA+15, Kol15, KA17, LSF14, LRW+15, LZL11, Lit13, LB10a, LRR+15, LRR+17, MHV17, MSPD12, MJKB18, NBM+15, NPM16, NGM+10, ONS+15, PM16, PBE14, PR10, PR12, PBL+18, Pos18, RF16, RCGT16, RFSF18, STT11, SMOB19, SW14b, SNG+11, SD14, SLW19a, SLW19b, SS11a, SAHP15, TVGB15, TO10b, WS11a, YÇÖ15, YW17, VFV19]. **electron-atom** [BH17, CYD11]. **electron-cyclotron** [PBL+18]. **electron-electron** [DCC+10]. **electron-loss** [Lit13]. **electron-molecule** [ART17]. **Electron-phonon** [PMVG16, CGRB14, KA17, NGM+10]. **electron-positron** [GGGH14, Kol15]. **electron-repulsion** [TO10b]. **electron-surface** [CL11]. **electron-transfer** [NBM+15]. **electron/hole** [Dua12]. **ElectronDiffraction** [SLW19a]. **Electronic** [BDPM15, CJH11, CSL+13, GZL14, THJ+10, WWL11, BC10, Bjö11, CLC14, CSK+19, Cor14, DO14b, FZ16, GWL+17, GCP+15, HKSW10, HCC14, Hol19, JWCW17, KKS18, LCY+11, LS19, LZP12, LSK+14, MED11, MNPY14, MC17, PVK+14a, PVK+14b, PSP16, Rut18, RJKC16, SS10a, TMA+15, TC12, TG11, YFAT17, zYCG+18, YG12, ZZD15, XNK+16]. **electronic-structure** [LS19, MED11]. **electrons** [Aza13, BH14a, BH14b, Jab17, KTB17, KQYH17, MDF11, NNWS15, OOK+12, RS12, Sit18, SLEF17]. **electroosmotic** [SS11c]. **electrophoresis** [SS11c]. **electrophysiology** [MFM15]. **electrospinning** [LPC+15]. **Electrostatic** [VPM16, BBL+13, CH19, CCHL11, CB16b, FK12, GB11, HZW+16, KC18, KK14b, LRR+17, MCWJ15, MRL18, SGDS16, YLQ+17]. **electrostatics** [CBB14, LCHM10, LCHM13, YBK+11]. **electroweak** [BM19]. **elegant** [YLYL17, KPA+19]. **Elegent** [Kas14]. **Element** [FHTO17, Hak19, BKOZ16, BLAS19, BCM+16, CCLL18, CMC+15, CKSM+19, CAN11, CTL15, CRA10, EKDGG15, FKS+19, GML15, GBP13, GLW14, Ham11, IP14, JTH14, KMD12, Koh15, KM17, LW14a, LHJZ10, LCQF18, MLS10, NMS14, Oti13, OVSI15, OT11, PS11, RS12, RVDS16, RDVS18, RTÅT15, SW14a, SDS15, Sha13b, Sha16, SBH+12, TXZL15, VDAH16, WP10a, YRR13, ZOZ13, vSGB+18, Hak16]. **element-Fourier** [BLAS19]. **element-spectral** [LW14a]. **elemental** [HW12]. **elementary** [FBG10]. **elements** [ABB+16, AC13, Arb12, CPWZ18, CCHL11, CK12, CBB14, FNPMB10, HS14b, LA13, MSRL10, PO14, Sar17a, Sar17b, SD10a, UFKB19, USOA13]. **eleven** [DJW+19]. **eliminate** [HHT14]. **eliminating** [SCM13]. **Elimination** [MBFB13, YXD+15]. **ellipses** [SC14]. **elliptic**

[Boy15, GCVA14b, HVP+19, MCL+17, PS11]. **elliptical** [Hal17]. **ELMAG** [KOT12]. **ELMs** [SCB+19]. **ELRADGEN** [AFIS12]. **ELSI** [zYCG+18]. **Embedded** [BM13, RHH12, DFM+15, Duf16, MKL17, PS14, PP13, SVGS18]. **embedding** [QJF16]. **Emden** [CB13b, KMM13, PDRG10]. **Emergence** [dSVLP13]. **emerging** [DS14]. **emission** [AAB+10b, CL11, EZBA16, LSF14, LL15, ZLM12]. **emissions** [VDJ+11]. **empirical** [VFV19]. **Employing** [Mis13, GX15, JuIAM16]. **EMUstack** [SDL+16]. **enabled** [HJE+19, KHBS19, LYP14, VPMVH+17, ALA+19]. **Enabling** [DSW+15a, ECD+10, GBC+18, ESM17]. **encapsulation** [DRUE12]. **enclosure** [CAN11]. **encoding** [CMSV14]. **encounters** [HLS12]. **end** [PPY14]. **end-point** [PPY14]. **ENDGame** [MW19]. **energetic** [PCGM14, TJH17]. **energies** [DT11b, Gen10, GFJ+14, GBJ+15, Kol15, Pos18, RJ12, TKP15, ZMCT12]. **Energy** [AAA+16, AK15, BG19a, BvH15, CMR17, GHMB+19, MGL13, NJ18, RtV16, XYZX19, AG14, AHH+19, AKV18, BMC+11a, BT17a, BDKS10, BH14a, BH14b, BUJ15, BKA+14, BIT12, Buc19, CLH+17, CDTV10, CHDCJA17, CC14, CC15, CXG+19, DCC+10, DGPW11, Den10, DR12, DFM+15, Duf16, Eme11, ECSH16, EFK+19, FTI18, FGGM11, FS17, FZY13, GBD10, Gio18, GZW17, GCVA14a, Hah12, Hoh14b, HEPW13, HS16, JPCG15, KTB17, Ker17, KAR+15, KK14a, KCA+15, Kra11, LAA+10, LCY+11, LL19, MD10a, MDHD18, MSPD12, MMT+11, Miy15, NRSVW12, PB13, QZ19, QZWU19, RPL+14, RFPM+17, Rom15, SSF+14, SA14, TAFD19, TM14, TVGB15, TS10, UA17, WRFS15, WS11a, WXL13, WX14, WZHE18, WP10a, WYH19, Wie15, Wil15, YZ16, ZPH+15, ZZD15, ZKS+18, GHBL18]. **energy-** [CC14, CC15]. **energy-based** [WP10a]. **energy-conserving** [DCC+10]. **energy-dependent** [Ker17]. **energy-invariant** [MDHD18]. **energy-preserving** [Miy15, WXL13, YZ16]. **energy-stable** [WYH19]. **engagement** [Che11]. **Engine** [GBJ+13, CJJ+17, DRI+16, GBFJ14, HDF+19, KRM+19, WGG+19, GBJ+15, GBJ+19]. **engineering** [Zhe15]. **Enhanced** [BHNS17, CHDCJA17, Rap11, JTP15, KGFS18, PLD15]. **Enhancement** [VCMS+13, CLY11, EEGW12]. **enhancements** [LOK+18]. **ENO** [AAD14]. **ENO-flux** [AAD14]. **Ensemble** [TDL+14, BALV16, BG13a, GA15, MMO+17, MHR+13, PA13, ZKW+15]. **ensembles** [CRNK12, FD13, Kra18b, MJB11]. **entangled** [JWC18]. **entanglement** [RLL12]. **enthalpies** [ZZH+16, ZMCT12]. **entire** [Wei11a]. **entropies** [ZMCT12]. **Entropy** [TW11, CHDF10, Les16, LLG17, PE17, VB19]. **entry** [JXTS16]. **enumeration** [CS16]. **envelope** [TL19]. **environment** [CPW17, Gio14b, JVR12, RTT+18, SUS+17a, WP10a]. **environmental** [GMPFC+14, KKS18]. **EnvironmentalWaveletTool** [GMPFC+14]. **environments** [FS17, GBC+18, NMCR15]. **EPAW** [SHW18]. **EPAW-1.0** [SHW18]. **EPCM** [PS14]. **ePDF** [SLW19b]. **epidemic** [CF17]. **epitaxy** [CZZ+19]. **epsilon** [GM17, GS14, HL13, Pra17]. **Epstein** [Ram10, Yan09].

EPW [NGM+10, PMVG16]. **eqtools** [CFW17]. **equality** [ON11]. **Equation** [LB10b, AL17, Asi10, BB15, BALV16, BK16a, BAR12b, Bot12, BMBC+17, BB13b, CWS14, Cap13, CVK+17, CYN19, CZS10, CC10b, CC12, CHZ18, DG10a, DS11b, DZ13, DGST17, DSP15, DM12, Eba13, Exl17, FTI18, Fil13, FGLB12, FGG11, GS15, GVS+15, GA10, GG16, GBSY18, GTG+11, GCVA14b, HLS+17, HP14, HC16, HC17, HWS16, HM12a, HAK+14, HJ14, HS14b, HH11a, HDZ14, HCSW10, IKS19, Ixa10, Ixa12, JC16, JL10, Jiw12, Jiw15a, KL17, KH12, KN13, KBSP12, KP14, KR14, KYSV+15, LD10a, LD10b, LV14, LZZL10, LS12a, LCKM14, LLXK16, Lin13, LBB+16, LYSS+16, LY16, MC16, MGL13, MGL16, MC12, MLS10, ML14, MN18, MA11, MM10, MM12, MJKB18, ÓN12, OILK17, ORS+14, OAKS11, OK14, PSB11, PSBT12, PAS11, PR13, PM16, Pla16, QSC14, RM10a, RHBH15a]. **equation** [RHBH15b, STK10, SVS19, iSYS12, SSB+16, SP16, SP18a, SSH+13, SD10b, SA15b, SB11, SLEF17, SGSG19, TKS10, TT14, Ter17, TY10, TH17, TKZ18, TKS19, UNK12, Ume18, Ume19, VDAH16, VMGP+19, VS19b, VVB+12, Wil19, XHLUF+18, XZ12, YZ16, YZ19, YK18, YSVM+16, YSMA+17, ZFH14, ZSW+17b, ZDWM17, ZST11, ZCG17, dB14, dlHV12, ATW+19]. **Equations** [QSB19, AAD13, ACCB13, APV10, ABB13, AD14, AD15, ABDR17, AG12a, ABH+19, ADdM12a, ACDdM15, ADdM15, ACDdM19, BSM13, Bar11b, BKOZ16, BLAS19, BCT17, BK11b, BB10, BB13b, BAK+15, BAK+16, BAK+17, BHW+12, CZD15, CR13, CDTV10, CB13b, CSJ+17, CKK+13, CBB+10, CM14a, CEF16, DT10, DT11a, DN13, DM17, DJ12, Dem13, DHJ13, DJ14, DSP15, ENEO15, EW14a, FDZ17, FBHB17, FF11, FSC13, Fon12, GML15, GJ14, GJLB12, GM17, GX15, GMHZ19, HVP+19, HLLH16, HK12, HHC+10, HB12, HM12b, HCHW11, IH11, JPSS10, JK10, JC13, JC14, JYPA18, JCL+18, Jiw15b, JSLM16, Kan14, KMM13, KD17, KO14a, KZC+10, Kra10, LK12, Lev19, LWZ14, LLP15, LST15, LKPH19, lLsSZ14, LLL12, LLL13, sL10, LRSS19, LSSW14, MDHD18, MJB+10, MHWH19, MWCY14, MZE13, Moh14, ICD13, MNOØ11, NO14, NO12]. **equations** [PKT15, PDRG10, PTS12, PSL+17, PE15, QYM11, QA13a, Ras09, Ras17, RBB15, SFV19, SAW18, SDM+12, SDS+17, SK15, SW14c, SP18b, SCLW16, SMdONF14, Sta11, SSK+13, SL14, TD14, Tia11, TYH+15, VSO+13, VBC+12, VJC12, Wan10a, WZ13, WYSW10, WT15, XWF18, XYK12, YWX11, YTYA17, YQM12, YQM14, ZWC+19, Zou18, dlHV10, dTOV18]. **equiangular** [ME18]. **equidistant** [LS15b]. **equidistributed** [GN14]. **equidistribution** [DF11a]. **equilibration** [iNSK+15]. **equilibria** [CFW17, LC15, MZE13]. **Equilibrium** [ALC18, Buc19, BDBV12, BPS+16, DMC+15, FBHB17, Hon10, JBKM15, KSL+11, PLF+17, PBD+15, SC15, Sin11, Sin12a, ZXZ+19, mZfXL15, dSFdFF13, LZ17]. **equipment** [MGFRG12, RBG+19]. **Equivalence** [FD13, Che17, Mel19, Ram10]. **ERKN** [CYSL12, WYSW10]. **ERMES** [Oti13]. **ERO** [MGA+13]. **erosion** [LNSD15, LSD18]. **Erratum** [ERS10c, Nat10, SGM11a, SJY20, Wei11a, Wu10]. **Error**

[BPMM14, PEMS19, WS11b, ABH+19, BKV16, CLL16, Cip13, ÇÖSÜ11, Exl17, FMW10, JCL10, Kra17, Kra18a, LS15b, MLS10, MBFB13, Ram19]. **error-controlled** [Exl17]. **ES2MS** [XNK+16]. **escape** [DS15]. **ESI** [LZ17]. **ESP** [SGDS16]. **especially** [SHW18]. **ESPRESSO** [BKC+17, MMSF+15, CGJ14, GTK+19b, HBL+13, JP10, GSZ13, KST14a]. **essentially** [AAD13]. **ESTEST** [YG12]. **estimates** [BKV16, KKK+15, LS15b]. **Estimating** [Asc10, AM17, GFB+10, GGF+13, JCL10]. **Estimation** [DS15, KTA12, ABH+19, BBB17b, DMP18, EVB14, IBB18, SM14, Sha18, TW15]. **Estimator** [Asc10, SAA+10]. **etched** [VSG17]. **etching** [MFG+13]. **eTextBooks** [LPBH11]. **Eucb** [TS11]. **Euclidean** [TGUvS19]. **Euler** [SBvD13, QYM11, QSB19, SP18b, YWX11]. **Eulerian** [JBG+16, JBG+17, PUO14]. **European** [AGL11]. **EUTERPE** [SSS+11]. **Ev8** [RHBH15a, RHBH15b]. **evaluate** [MNV13]. **evaluating** [LHJ+15, RLL12, SZC+13, UA17, WDR16]. **Evaluation** [AHK+12, ACD+14a, AC13, ADT+19, AG12b, BBUY13, BDJS18, BCH13, BHJ+15, BHJ+18, BvH15, CZ17, CSRV13, Deg15, FSH13, GBRB11, HJL+14, KZ14, KHN19, LAA+10, LSYZ12, MGB18, MSR10, MR13, MN16, MFG+13, PZL+19, PVK+14a, PVK+14b, Str15, TO10b, Yi11, ZC12, vH11]. **evaporation** [TB14, XLX+15]. **Event** [DDM14, GGGH14, KBT+14, MM11, TMD11, VRV15, VRV18, BPSS18, BABC19, CKS10, CK19, DIR+19, De 11, dAFdSVM12, Gin10, GTL11, Kas14, KRW13, RHHF12, Sha16, YWW13, vH18]. **Event-based** [TMD11, BABC19]. **Event-by-event** [DDM14, VRV15]. **event-driven** [De 11, GTL11, RHHF12]. **Events** [EFG+10, AFIS12, BDC+14, Bin13, HWT10, WW12]. **everyone** [Kap16]. **EVO** [BK13a]. **EvolFMC** [JPSS10]. **Evolution** [Cho11, HLS12, ABH+19, BCR14, BCT17, Bot11, Brá15, CJJ+17, FSJ+16, GM16, HK12, Hon10, HWCH11, JPSS10, JMG+17, MBRV+13, SW11, VPM12, XLX+15]. **Evolutionary** [BK13a, AFZ17, AFZ18, ATCZ19, FLA+16, LZ11a, LZ11b, LOSZ13, SHW18, Wie18, dASJC+19]. **Evolver** [Ore19]. **evolving** [FGC+11, PHA18, US16]. **EW** [BS13b]. **Ewald** [KR16, LHZ11]. **Exact** [CS16, ID18, JP11, MP11, MTO15, PMMW15, SH12b, SH16, BKC+17, CL10, HCH16, HW12, LKL11, Lee18, Pla16, QLN14, SA15a, Wei99, Wei11a]. **exact-exchange** [HW12]. **EXAFS** [PCVZ11, TKP12]. **Examining** [WAHL13]. **exascale** [AGL11, DdJC+19, KY14]. **excellent** [DSW+15a]. **Exchange** [NHD16, ABC+18, AAB+10b, BKC+17, Boe18, DG10c, GXF+15, GJB11, HW12, IIO16, IFOI18, JL19, JJ15, LK15, LKT+16, MOB12, RZ19, UO15b, UO15a, WISA11]. **excitation** [BP12, CM15, GVS+15]. **excitations** [MC17]. **excited** [BP12, CWW15, Er14, GH11, LH11, LMAB16]. **exciting** [PGD17]. **exciton** [VBMS17]. **exciton-polariton** [VBMS17]. **excluded** [BHW+12, CHNS18]. **exclusion** [BBH+10, BBH+11a, LTL+12]. **executing** [LYJH19]. **exemplar** [JTP15]. **exhaustive** [TC11a]. **ExoData** [Var16]. **exoplanet** [Var16]. **expanding** [HM12c, LP15]. **Expansion**

[JDG12, PEMS19, AQJ10, AK13b, CSPAD10, Deu16, FLW17, GS14, HWG13, HvWT17, HK15, HL13, IKS19, IUM13, KZ14, Per14, Pit12, Pre18, Ros16, SKFP16, SGW17]. **expansions** [Eks11, GB11, TKR13]. **experiment** [Ano11a, CKhN11, DDM14, DMH16]. **experiment-computing-theory** [CKhN11]. **experimental** [CRNK12, KSH14, OBM19]. **experiments** [CHC+11, GSB+14, KD16, DMH16, VLD+12, WJCZ18]. **explained** [JKG+18]. **Explicit** [Bla15, VEB+18, XQ19, AH13, Ber16a, Ber16b, CW16, DBMR18, DM17, DJ14, FG13, FGR14, KZC+10, KAS12, LCE+13, QSC14, RL10, SCLW16, SS10b]. **explicitly** [LV14, PZY16]. **Exploiting** [ASPW13, BBV+16, RDN+17, RFSF18, YRR13]. **Exploring** [CDS+13b, GTS14, Yan11, MG10a, Mül11a]. **explosions** [BNAB11]. **exponent** [XZF12]. **Exponential** [Ert15, PTMDPK14, ZNT15, AQJ10, BCT17, CCK23, CEP18, GDB10, GH11, Ike18, MHWH19, Moh14, PZY16, Pat12, PH11, Ram12]. **Exponential-time** [PTMDPK14]. **exponentially** [Bla15, CFMR10, FG13, Miy15]. **exponentially-fitted** [Miy15]. **exponents** [MH18, dSFdFF13]. **expressions** [Dua12, MBGK11, WRBL19, Zit11]. **Extended** [FLW10, FMW10, GS17a, KSL+11, KR16, LS15a, PPY14, WC15, Wu10, YWYF09, BSM13, BM19, Bla15, BDGM+17, DDH17, DGST17, LWYW11, LW13, Mül11b, Mül14b, iNSK+15, PBL+18, RLM13, XW15, YZWR14]. **extended-Lagrangian** [iNSK+15]. **extendible** [SCM14]. **Extending** [KK16b, FHA17]. **extensible** [CFW17, RBG+19]. **Extension** [AM11, CXL19, GHvSF14, KAH18, Maî12, NBW16, GYW+10]. **Extensions** [ABH+18, BCPS11, PS12]. **extensive** [BG14b]. **exterior** [BH14b, BH16]. **eXtra** [BBB+15, BDDM18, CD12, EGPS10, PR13]. **extra-high-order** [CD12]. **Extracting** [SAS11, CTT17]. **extraction** [CKCS13, MSPD12, OG14, OO15b, OO15a, RJ12]. **extragalactic** [KOT12]. **extrapolation** [MC12, dDYK+18]. **extrasolar** [HTT13, HTT14]. **extreme** [BY17, DKOS14, NOR15, VV18, WSH+12]. **extreme-scale** [BY17, WSH+12]. **extrinsic** [DMC+15]. **extruded** [NCB18].

F [NDSH18]. **F-t-Pj-RG** [NDSH18]. **FabSim** [GBS+16a]. **Facilitating** [GBS+16a]. **factor** [CCK23, GDB10, MSZW11, TZG12, XHLUF+18, dlHV10, XHLUF+18]. **Factorization** [BvH15, JOK13, Gar19, KK14a, LHJZ10, RW11]. **factors** [AHK+12, Pál12, YFAT17]. **Faddeev** [DVB11]. **Faddeeva** [Cha16]. **failure** [Pra11]. **Falkner** [RL10]. **family** [ACDdM15, ADdM15, DZ13, rJmYT11, NCHN15, WCT11]. **FAPT** [BK13b]. **far** [CZF18]. **far-field** [CZF18]. **FAST** [Ruf13, ABRS12, BG13a, BKM11, Bot11, BGL+14, BSW12, CZ17, CdLOL19, CC10b, CC12, DHJ13, GRZ10, HC16, HS16, JK19, JL19, KAK12, KME+11, KHN19, Lut15, Maz13, MSS+14, PKRS16, RK19, TO10a, VLPPM14, WISA11, WSO+12, AGB+15, BT17b, BMBC+17, Bru13, CJJ+17, CRLS18,

CB15d, CCN17, Dat13, Fow18, GMF+17, GJHF14, GCH+18, Ham11, HDF+19, HP11, JLW13, KL17, KKL+18, LC15, LCQF18, LL15, LCHM10, LCHM13, LLX14a, MRZ10, OL12, OYK+14, Qia10, Qia17, RMW13, Ser17, Ste17, Sza16, iT11, TSIM16, TL19, XW15, XAPK14, YBK+11, YBNY13, ZHPS10, ZC12, ZPvR16, vWB10, EBDM17, FCC15, JLW13]. **Fast-NPS** [EBDM17]. **Faster** [Nie18]. **favourite** [DDK+15]. **FCNC** [CRC+13, RCD+10, Ros15]. **FD** [DM17]. **FDCHQHP** [WW14]. **FDTD** [Ram10, BAR12b, CKK+13, Fan19, FBN+13, FOB+15, Jia18, KKP11, KP12b, KO14a, KRB15, LL19, LJD+19, ORI+10, PYW+14, Ram10, Ram12, RHW+12, SSH+13, VEB+18, WWHW14, WGG+19, Yan09]. **FDTD-based** [BAR12b]. **Fe** [LQZ+13, BTM+17, LS17a, TG11]. **Fe-3** [LS17a]. **FEAST** [LZP12]. **feathers** [TBB+14]. **features** [CDSG11, DZ15, EW16, dlRAPL11]. **featuring** [EBCB+14]. **FeCo** [PEMS19]. **Fedosov** [Tos10]. **feed** [KSYY13]. **feed-back** [KSYY13]. **feedback** [CDL+12, OCF10, mZfXL15]. **Feenberg** [MBGV15]. **FELIX** [RVDS16, RDVS18]. **FELIX-1.0** [RVDS16]. **FELIX-2.0** [RDVS18]. **Feltor** [WEH+19]. **FEM** [LHC+13, LWP+17, MGL16]. **FEM-based** [MGL16]. **FEM/MOM** [LHC+13]. **FEMSIM** [MHV17]. **femto** [LJSW11]. **femto-second** [LJSW11]. **femtosecond** [IB11, REtVH12]. **FEOS** [FTI18]. **Fermi** [MN16, BDP16, Buc19, CCL18, KCT15, Kaw19, SLK19]. **Fermi-surface** [Kaw19]. **FermiFab** [Men11]. **fermion** [AHK+12, BNO17, FGLB12, WRB11]. **fermion-doubling** [FGLB12]. **fermionic** [Men11, ÖKC11]. **Fermions** [FKL13, BG11, BCDI12, CZ19, CvW12a, CvW12b, CL16, GM18, LSR+17, UKKB19]. **FermiSurfer** [Kaw19]. **ferrimagnetic** [CJH11]. **ferroelectric** [Gen10]. **ferrofluid** [PLD+13]. **ferromagnetic** [CAGL13]. **FESTR** [Hak16, Hak19]. **few** [CKS10, FE11, PKRS16, RAV11, RC11]. **few-body** [CKS10, PKRS16, RC11]. **few-level** [FE11]. **few-particle** [RAV11]. **FEWZ** [GLPQ11, QGLP13]. **FeynArts** [FHH+14, Sta10, SV12]. **FeynCalc** [SMO16a, Sht17]. **FeynDyn** [Dat13]. **FeynHelpers** [Sht17]. **FeynHiggs** [HP17]. **Feynman** [Bor14, Dat13, Ell17b, Fri14b, GM17, Kan18, MUU18, Nog17a, Nog17b, Pan15, Sem16, Smi15, Smi16, Stu10, XWhZ13, XW15, dALM+12]. **FeynRules** [DDF+12, ACD+14b, ADF+15, DF11b, REBS16]. **FFT** [BC11, JKIS16, KVV19, LYX+17, MHWH19, TIM+16, YKK+19, YXT+15]. **FFT-based** [BC11, KVV19]. **FFTs** [DO14a]. **FFTW** [KT10]. **FGT** [CLB11]. **FHI** [JGAL+13]. **FHI-gap** [JGAL+13]. **fiber** [CS17]. **fibers** [APRG11]. **fibre** [BF16]. **fibril** [SBB+17]. **FibrilJ** [SBB+17]. **fidelity** [HZW+16, MMO+17, TTS11]. **Field** [NHD16, RLMGM+11, ABB+19, BW16, BG11, BMS+16, CZD15, CLHL19, CHDCJA17, CSJ+17, CZF18, CCHL11, CPHL14, Cri18, CHZ18, DXY+19, DF13, DPB16, DBP19, EPB+16, EEGW12, Erm18, ESM17, Fuk17, GTK+19a, GA15, GZW17, GLW14, GX15, HO13, HEF+11, JHH+19, JTT11, KB15a, KKCC19, KH12, LPRPR17, LDR+17, LLSK17, LFG14, LXR+18, ME18, McM17, MEG12, NPVR14, NVW+13, Nut14, PC11, PCGM14, Pit12,

QL10, QJF16, RS12, RK11, SEW12, SEW14, SZM+14, SCM+16, SW11, TSK+17, TKP15, WHG+19, WYH19, Wie18, XHLM12, XLX+15, YLK10, YZ19, ZKG+18, ZY19a, ZY19b, ZKS+18, dB14, vdSM16, Asc10, HL19b]. **field-aligned** [DXY+19, HO13, LDR+17]. **field-particle** [CSJ+17]. **field-theory** [DF13, Nut14]. **fields** [Asc10, BMW14, CFSK14, CSP+19, DOP17, Dua12, GH15, GBSY18, HSD17, JPK+12, KOT12, Ki10, LS19, LSJ13, LR13, LR16, ÓN14, PQTGS17, PM13, SW14a, SW14b, SAHP15, Tau10, TC11b, Wai12, ZYZ15]. **FIESTA** [SST11, Smi14]. **FIESTA4** [Smi16]. **FiEstAS** [Asc10]. **fifth** [DSW+15a, NS15]. **file** [iSYS12, SMCB+15, SV12, dBCH14]. **file/Mif** [CF16]. **files** [CF16, Hir15, Sta10]. **filled** [CBB14]. **films** [BL14, BKN+17]. **Filon** [SBvD13]. **filter** [BALV16, LFG14, TdAdSS11, ZLFM11]. **filtered** [AKS17, Er14, KP12a]. **filtering** [GMRHRCME13, GMPFC+14, HKZN17, MGR16, PCVZ11]. **filtration** [Ray10]. **financial** [CLKK11]. **find** [ADdM14, ACDdM19, MLGVE14, Pra17, TMS19, ZAHA10]. **Finding** [ABB+19, ACDdM15, DdMN16, Kan14, SS13a, VJC12, BUJ15, GLZ17, Ike18, MST+18, MWCY14, RC18]. **Fine** [MEM+11, BDL+19, Bru13, CYD11, Faw10]. **fine-grain** [BDL+19]. **fine-grained** [Bru13]. **Fine-sorting** [MEM+11]. **fine-structure** [CYD11]. **FinFET** [LCH11]. **Finite** [ALA+19, DJ12, DSPJ10, FHTO17, Hak19, HZW+16, KST14a, MAIVAH14, OBH10, OOGP19, SBvD13, TMA+15, Wil19, Zag14, AAD13, AS11a, ACTP15, BKOZ16, BM16, BMNS14, CCLL18, CKSM+19, CAN11, CTL15, CW16, CCHL11, CRA10, Cor14, DT10, DM17, Den10, EKDGG15, Evs14, FNPMB10, Fu19a, FKS+19, GML15, GBP13, GS17b, GS17a, GB14, GLW14, GMHZ19, HE13, Has11, Hsu11b, HZ11, IP14, JK19, JLM18, KCT15, Kob13, KMD12, Koh15, KM17, KVW11, LOL+18, LD10a, LA13, LW14a, LV15, LHJZ10, LLXK16, LYX+17, LHH+12b, LOK+18, LNP+17, Maź19, MB12, MSS+16, MMA15, MJB11, MLK+17, MLK+19, MBFD12, ICD13, Naz12, ÓN14, OWS+14, Oti13, OVSI15, OT11, PVK+17, PB16, QLN14, Ram14, RS12, RVDS16, RDVS18, RC13, RC16, SW14a, SP16, SLK19, SC15, SHL+11, SBH+12, SAN18, SCG11, TT14, Ter17]. **finite** [TYH+15, TXZL15, VLPPM14, VDB14, VDAH16, VV16, WZ13, WFZG19, WP10a, Wit14, XGH+19, YRR13, YXT+15, YQM12, YQM14, dDYK+18, Hak16, HKF+12, LYP14, MCM+12]. **Finite-Difference** [Wil19, DSPJ10, TMA+15, ACTP15, CW16, FNPMB10, GS17b, GS17a, GB14, HE13, MSS+16, MBFD12, ICD13, RC13, TT14, VDB14, VV16, Wit14, MCM+12]. **finite-dimensional** [Naz12]. **Finite-Element** [Hak19, CKSM+19, VDAH16, Hak16]. **finite-range** [Cor14]. **finite-rate** [SAN18]. **Finite-size** [OBH10, Evs14]. **Finite-temperature** [KST14a, BM16, KCT15, SLK19]. **finite-time** [Has11]. **finite-volume** [Fu19a, LHH+12b, SHL+11]. **finite-volume-particle** [LOK+18]. **finite/infinite** [SBH+12]. **Finsler** [YE14b]. **FIRE** [Sht17]. **FIRE4** [SS13c].

FIRE5 [Smi15]. **First** [BKV16, EY11, FWZ+12, PBMAD12, SQL+10, ADdM12a, ACDdM14, ADdM14, ACDdM15, BP12, Boy15, CSL+13, DdMN16, ELL+17a, GPS+13, GM18, GCVA14b, HL19a, JLA+14, LZL11, LS17a, NS15, SS13b, SWL11, VDF15, ZZ17a, ZFZ19]. **First-** [BKV16]. **first-order** [VDF15]. **First-principles** [EY11, FWZ+12, PBMAD12, CSL+13, LZL11, SWL11, ZZ17a, ZFZ19]. **Fission** [VRV18, Rom15, VRV15, VRV15]. **FIST** [VS19b]. **fit** [Gag12b, GH18, Gor19, SGDS16]. **fits** [DS15, AKKK16]. **fitted** [CFMR10, DMP18, FG13, KMS14, KV10b, Miy15, PS14, RVA14, WT15, YZZ11]. **fitter** [BGH+18]. **Fitting** [GD14, BW16, Ber16a, Ber16b, BPMM14, Bla15, Bru13, DFM+15, Duf16, DSPJ10, Eme11, KRB19, LFG14, LAS+17, Pat12, PDL+18, PBD+15, RFPM+17]. **five** [SMGK19, XMLC16]. **five-body** [XMLC16]. **fixed** [Ano20, BMW14, CNMC10a, CNMC10b, FGGM11, KK16a, LP15]. **fixed-memory** [LP15]. **fixed-phase** [BMW14]. **fixed-point** [Ano20, KK16a]. **fixing** [CSBO13, HbotRC15, SV13]. **Flame** [DGJH19, WLM14]. **flames** [EZL+16]. **FLAPW** [MBFB13, DPHB17]. **Flash** [Dim14]. **flat** [Sha18]. **flat-histogram** [Sha18]. **FLAVOR** [Ros15, EFG+10, AM10, CDS+13b, CGV13, Mur14]. **flavors** [GM18]. **flavour** [AM11, AMR19, HKZN19, MHA+12, PS12, MHA+12]. **Flexible** [TCK+15, CSRV13, DLGP10, FCCTFR18, HvAS+13, JK14, KPA13, KBSP19, LDR+17, ORI+10, PH13, SGM11a, SGM11b, SC16a, KBT+14]. **FlexibleSUSY** [AhPSV15, ABH+18]. **flight** [Deu16, YZZ+17]. **flip** [KO14b, Kom15a, Kom15c, KO16]. **floating** [CH11b]. **floating-point** [CH11b]. **floor** [PC11]. **Floquet** [LKM+16]. **Flow** [San11, BBB+17a, Beu11, CC16, CLW11, CRA10, CL13, DMC10, FHA17, FKS+19, FM15, GRLS18, HSF+15, HCT11, JU17, KK13, Kra18b, LCC13, LLSK17, LHH+12a, LTL+12, LOK+18, LSD18, MSI+10, MMC10, MPM14, MBS+10, MNPF17, NFA+16, NB17, NHSY15, OILK17, OP12, PBF+16, PC11, PG17, RF15, Sie16, SS11c, SQA+15, SDJ+12, SJW10, SSM+17, TFBW14, TKL+12, TPC16, VSO+13, Van15, VK16, Yua19, ZY19b, ZNT15]. **Flow-induced** [San11]. **Flowchart** [KLV15]. **Flowchart-based** [KLV15]. **Flowgen** [KLV15]. **flowing** [Sza16]. **FlowPy** [FSC13]. **flows** [ACMM10, BL19, BHNS17, BBF+13, BOGL17, BCM+16, BTC+17, CCD+16, CPR12, CdLOL19, DBMR18, FDZ17, GZZ19, GSC+16, HKPF19, HZW+19, HJGL18, HJGL19, JvOK17, JPK+12, Ki10, Koh15, KPPC13, LSK+13, LH18, MTE17, MRVF13, ML16, NCB18, PBD+15, PE15, RJLL16, SYD17, SCM+18, Sza13b, Sza13a, TKJ19, TIMM13, TCP13, VL19, WZS+11, WG16b, WMI19, XD16, YSLY19, YS17, ZOZ13, ZXZ+19, ZPS+18, ZBN+19, vdS10]. **fluctuated** [LCH11]. **fluctuating** [KFF+16]. **fluctuation** [MHV17, Voy13, ZC12]. **fluctuations** [HBP14, SGDS16]. **Fluent** [LNSD15]. **Fluid** [OBPL19, WWR+16, ALA+19, BHNS17, BHS18, CCD+16, CXL19, CGJ14, CL13, DOP17, DF11a, DCU+19, DMC10, GZW17, GLW14, HWCdM19, HMR+19, HF16, HCHW11, JHH+19, KK13, KCN18, KGFS18, KTE+12, Koh15, LOL+18, LHH+12b, LH18, LSD18, LHGF18, LDF+16,

MOD13, ML17, MJKB18, OP12, PVK+17, SH12a, Sch14a, SLR+11, SHL+11, SQA+15, TD17, sX14, ZZG+16, ZFR18, Zag14]. **fluid-elastic** [KGFS18]. **fluid-particle** [Sch14a]. **fluid-structure** [DCU+19, HMR+19, LH18]. **fluid-type** [HF16]. **fluids** [BOPL17, CZ18a, DS11b, GAHP15, JPK+12, MRZ10, SGNL17, SSF+17, SA14, WLU11, XD16]. **fluorescence** [CDSG11, MD11b, ZLM12, RMW13]. **flux** [AAD14, GAB+16, HO13, HF16, HHC+10, LHJ+15, QM10, SMC+17, TCP13, VL19, WFV14, HSD17]. **flux-coordinate** [HO13, SMC+17, HSD17]. **flux-difference** [TCP13]. **flux-driven** [GAB+16]. **flux-vector** [QM10]. **fluxes** [BHN+16, ORS+14]. **fly** [GGG16, Ray10]. **FMFT** [Pik18]. **FMM** [CLB11, ZHPS10]. **foams** [KDM17]. **Fock** [BMW14, PSL+17, SEW12, SEW14, SW14b, SDM+12, SDS+17, SSK+13, BM16, DG10c, Fro11, GBD10, JZZ+19, KAK12, Kob13, KS12, OT11, ZF16, ZYZ15]. **FOCUS** [CFF19]. **Fokker** [BMBC+17, JSLM16, KBSP12, PG17, SLEF17]. **folded** [DPB16, DBP19, YKK+19]. **folded-Yukawa** [DBP19]. **folding** [GC10, GC13, GC16, GC18, GCK19, LWL11]. **following** [HSK+12, KYKN15a, KYKN15b, Nis11, XGH+19]. **food** [PCEH15]. **forbidden** [MD10a]. **forbids** [DG16]. **Force** [BPS+16, SEGP15, YK12, AK15, BW16, BJ11, BMDP19, BDGM+17, CSP+19, DFM+15, Duf16, ESM17, FSH13, KRM+19, KKCC19, LS16, RK11, SGM11a, SGM11b, Ume18, Ume19, ZYL+19]. **Force-based** [BPS+16]. **force-field** [RK11]. **force-fitting** [DFM+15, Duf16]. **Force-gradient** [SEGP15]. **forces** [ASGLK10, BTM+17, BWPT11, GAHP15, GD14, KK17, MOD13, RC15, RU12]. **forecast** [ADdM16a, ADdM16b, CDdM14]. **forensic** [SUS+17a]. **form** [AHK+12, GM17, KO14a, Pál12, Zhe15, CMS17, KUVV13, KUV15, TV10, CKJR11]. **formalism** [FWZ+12, KCA+15, MBF+10, THJ+10, VKP14, Voy13]. **format** [ABC+18, BDKS10, BABC19, CMSV14, DKOS14, GVPJ18, JTH14, dBCH14, RSSH+10]. **Formation** [NJ18, BRL12, BSWC14, CGSB18, CHDF10, GTL11, HKF+12, IBKK11, MTS+16, MLEM19, UIY11, ZZH+16, ZDD+13]. **FormCalc** [FHH+14]. **formed** [MFLY19]. **forms** [MWCY14]. **FormTracer** [CMS17]. **formula** [ACC17, CMN12, TO10a]. **formulas** [BCMS10]. **formulation** [CKT17, CLJ12, CB15b, GS17b, GS17a, HRC11, JL19, Kap12a, Kap12b, MMA15, VEB+18, YSLY19, ZDWY10]. **formulations** [Ram12, Ram14, WLU11]. **FORTRAN** [MCA17, AC16, BS13a, BW12a, BV13, BD14, DET12, DDH17, FGJB19, GH18, GHN19, GST12, HE13, HM12a, JCL10, KS12, KYSV+15, KLM+19, LZL11, MBGK11, NS11a, PZY16, PG10, SFV19, Sar17b, iSYS12, SSG+10, SSG+18, SHZ13, STY15, STY18, SS10a, SF10, WW14, YSVM+16, YSMA+17, YB13, Zag14, ZZSW19, vH10]. **Fortran-77** [GH18, GHN19]. **Fortran-based** [DDH17]. **Fortran2003** [DLW+18]. **forward** [MAC12, VEM12]. **Four** [Boy15, dSF18, ARAB+17, BH13, GKM10, GSMK17, KMA+12, MBGK11, MGK13, Mül14a, Pik18, SMGK14]. **four-dimensional** [KMA+12, Mül14a]. **four-loop** [Pik18]. **four-particle**

[GKM10, GSMK17, MBGK11, MGK13, SMGK14]. **four-point** [BH13]. **four-quark** [ARAB+17]. **Fourier** [FCC15, JLW13, RJW+19, AQJ10, AH13, BNPPD19, BK11a, BLAS19, BCM+16, CZ17, CZ18a, GMF+17, HbotRC15, KZC+10, LDF+16, MJB+10, PCGM14, RJW+19, RWKS15, SS11b, SBvD13, TO10a, Trö11, WLM14, YZ16]. **Fourth** [BK16a, MC16, XYK12, BIT12, DZ13, HZ11, KMS14, LLXK16, lLsSZ14, NS15, PZZL19, SB11, SS10b, UNK12]. **fourth-degree** [UNK12]. **Fourth-order** [BK16a, XYK12, BIT12, DZ13, HZ11, LLXK16, lLsSZ14, PZZL19]. **FOXTAIL** [TJH17]. **FP** [FWZ+12]. **FPGA** [KHZ+18]. **FPGA-based** [KHZ+18]. **FracSym** [JC14]. **fractal** [ADdM+12b, EBCBG17, GTL11, GFB+10, GGF+13, MFLY19, RU13, GGF+13, GES13]. **fraction** [BMS+16, LHG+19, ZTG13, ZTG14]. **fractional** [CYN19, CZZ+19, Dev12, DS15, GMHZ19, HZ11, JC14, JL10, LLL13, MDHD18, PSB11, PSBT12, SW12b, SMGK19, YQM12, YQM14, BK13b]. **fracture** [RTÅT15, VLM11, VKLM11, VLM11]. **FracVAL** [MFLY19]. **fragment** [JWCW17]. **fragmentation** [BG14a, DG16, HK12, MST+18]. **frame** [LV19]. **frames** [MFS+10a, SS11b]. **framework** [AKH+18, Ano11o, BL19, CMC+15, CEZ16, CPWZ18, CFS13, CFFR15, DMC+15, ESM17, DRI+16, GVR19, GBFJ14, HMR+19, HMR14, HM12b, ILZ+19, JEC+12, JNN12, JNN13, KEH12, KSTR15, KSH14, KPOR18, LFKD18, LSDD14, LS14, LS15a, LRW+15, LZP12, LHB+19, MLR10, MGFRG12, NBM+15, NPVR14, PGO17, RBG+19, RM14, SV14, SSX14, Sit18, SJ11, SPS18, Sva12, TOB+14, TE18, TVT+16, VEB+18, WFV14, ZZH+16, ZHL11, CF16, FCC15]. **FRAPCON** [YLL+19]. **Free** [ACMM10, Gen10, VS19a, AK15, ACTP15, BCT17, CCD+16, CGM17, CP15a, CPCDdM18, CXH+15, CZF18, CPR12, Deu16, DFM+15, Duf16, DGG13, FYK18, FS17, FLE19, FBHB17, FM15, Gio18, GZZ19, Hon10, HS16, HHS+10, JPCG15, JCL+18, KT12, KST14a, KH12, LKA+16, LF12, LWES18, MRL18, McM17, MSS+16, ORI+10, PIH11, QZWU19, DMH16, RJLL16, SA14, TKJ19, UA17, Wil15, WPAV14, XD16, Zag14, ZOZ13, ZPH+15, Zhe15, ZMCT12]. **free-boundary** [FBHB17, Hon10]. **free-form** [Zhe15]. **free-software** [ORI+10]. **free-standing** [ACTP15]. **Free-surface** [ACMM10, CPR12, GZZ19]. **free-surfaces** [TKJ19]. **freedom** [Er14]. **Freeze** [BBG+18]. **Freeze-in** [BBG+18]. **Frenkel** [AMM11]. **frequencies** [KMD12, RVA14, RJ12, YFAT17]. **Frequency** [HC17, BDGM+17, GLAC13, GB14, Hsu11b, KMD12, KM17, KSY17, LY16, LAG+17, MCP+11, Oti13, PP13, Ram10, SVG10, TSIM16, TIM+16, TUY15, WCT11, YZWR14, MCM+12]. **Frequency-domain** [HC17, MCM+12]. **fresh** [Fri19]. **FRESHS** [KBT+14]. **Fresnel** [JTP15, VLZ17]. **FRET** [EBDM17, HG13]. **FREYA** [VRV15, VRV18]. **fRG** [Roh16]. **FRIB** [HDF+19]. **friction** [AMM11, HST+11, RU12]. **frictionless** [LDW13]. **Friedel** [TW11]. **friendly** [CFS13, RFPM+17]. **fringe** [MB12, MB12]. **FRODO** [AC13]. **frog** [AZM14, HP14]. **front** [Ano16m]. **fronts** [KR14].

Frozen [LY16, RCGT16]. **frozen-core** [RCGT16]. **frustrated** [IUM13, KGNS10, Leó12]. **frustration** [HML11]. **fs** [REtVH12]. **FSAL** [FLW10]. **FSI** [FHTO17]. **FTS** [Ruf13]. **Fuchsia** [GM17]. **fuel** [AZM14, BCP+16, NGCI+12, SKK+19, VS19a]. **fuel-performance** [YLL+19]. **Full** [DNPS13, AM14b, AM19, BMU11, CL15a, CGRB14, CFF19, Dan11, DGS+19, FYK18, FEH11, GAB+16, HEF12, JBG+17, KGG+16, Liu15a, LWES18, PBMAD12, PCGM14, RE19, Wie18, YTYA17, ZYZ15, RSSH+10]. **full-** [GAB+16, DGS+19]. **full-field** [Wie18]. **Full-Metadata** [RSSH+10]. **full-orbit** [CFF19, PCGM14]. **full-potential** [LWES18, PBMAD12]. **full-torus** [KGG+16]. **full-wave** [AM19, FYK18]. **fullerenes** [RM14]. **Fully** [LOL+18, LWES18, FVH18, HHS+10, KRB15, PN15, Pik18, SSB+16, VVB+12, YSLY19]. **Fully-implicit** [LOL+18]. **Fully-relativistic** [LWES18]. **FUMILI** [Sit14a, Sit14b]. **FUMILIM** [Sit16]. **function** [AQJ10, AKR15, Ano20, AK13b, ACDdM19, BH11, BSGG10, BK16b, Cha16, CDL+12, CYOS19, DCC+10, DN18, DM17, DdMN16, Fen12a, Fen16, FM12, GST12, GGG+19, Jab12, Jab13, Jab15, Jab19, JLM18, KDM11, KV19, LSF14, LKL11, Lee18, LHSL14, MR13, OKP10, PLF+17, Pla16, PM13, Raw15, RMC16, SLW19b, SS11a, SGSG19, TTT16, Veb12, XD13, XHD15, YOM+19, YTYA17, ZF15, ZDWM17]. **function-velocity-magnetic** [YTYA17]. **function/orbital** [SGSG19]. **Functional** [BC10, DBB12, GS17b, GS17a, LT15, VCMS+13, ASA18, AKZ+13, BBH11b, CDTV10, CXH+15, FSC13, GWL+17, GBR+14, GSZ13, HB12, HHS+10, JCW+13, JL19, KT12, KCT15, KKL+18, KBSP19, LSR+17, LS11, MGRB11, MOB12, MSS+16, MC17, OOK+12, OT11, RHC15, RCH16, Roh16, RWKS15, SCRS17, SBH+12, SA14, TVGB15, VBS+17, WX14, WLGY18, YKK+19, YLYL17, YRR13]. **functionality** [BC19, CB15a, CB17, LHG+19]. **Functionally** [WT15]. **Functionally-fitted** [WT15]. **functionals** [GBR+14, LRW+15, MOB12, NPAD11, RCH19]. **Functions** [CGO17, ARAB+17, ATA+19, AWK+16, BCC+18, BDBV12, BMW14, BKK13, BKM14, BK15, BK16b, CM10a, Cai11, CMSN18, CD15, CCWL11, CLJ12, CCK23, CYOS19, CSRV13, CEPI10, Cou13a, Cou13b, DRR15, DGST17, EUT+15, Ert15, ERP+12, Fow18, FP14, GDB10, GST15, GTS14, GS14, GYW+10, GCVA14a, HK12, HCH16, HL13, HM12c, JL12, KK16a, Kap12a, KH11, KCL11, Kir10, KAW+10, LD10b, LM12, Liu11, Liu13, MK10, MYP+14, NGM+10, OWS+14, PPY14, PDRG10, PG10, PVK+14a, PVK+14b, PMVG16, PGMU19, PB16, RA13, RE12, Sar17a, Sar17b, SSG+10, SSG+18, SPMM11, SD10b, WWS10, WAHL13, WPD+15, ZDWY10, ZMCT12, vH11]. **fundamental** [LZP12, MK10]. **Fusion** [RtV16, AGB+15, DDKM15, ECSH16, FK12, FR15, HLM13, Hon18, HJL+14, KRK16, LLQX19, LHJ+15, LHB+19, Maz13, MN18, PBL+18, SKK+19, Shi16]. **fuzzy** [GES13]. **FV** [dlRM18].

G [GJHF14]. **G-JF** [GJHF14]. **g_contacts** [BG13a]. **Ga** [TMA+15, TW11].

GaAs [CAGL13, TMA+15]. **GADGET** [Cro16]. **GADGET-2** [Cro16]. **Gafchromic** [ACdS13]. **GAFit** [RFPM+17]. **GAIA** [Yi11]. **GAIN** [ARYT17]. **GAIN-MPI** [ARYT17]. **galactic** [JH11, VDJ+11]. **Galerkin** [BK12, CC16, EW14a, Ein16a, GML15, GMHZ19, HLLH16, HWS16, LLP15, LLMW17, Maz13, MC12, QWZW18, SVS19, WP10b, XWF18, YWX11, ZOZ13]. **gallery** [ALSW14, Bal19]. **GALPROP** [VDJ+11]. **game** [QHC+10]. **GAMESS** [IFOI18]. **gamma** [GST15, RLS16, Tic10]. **gamma-ray** [Tic10]. **GammaCHI** [GST15]. **GaN** [Dan16, Dan17, Dan19]. **Ganga** [HKK11]. **gap** [BDK11, CKCS13, JGAL+13, LOK+16, LHSL14, MD10a, SI11, SW13a]. **gas** [DS13a, Fu19b, GM11, HZW+19, HCHW11, JHH+19, JvOK17, KR14, LHH+12a, LSK+13, PZZL19, PBF+16, PG17, PE15, RC15, Sza16, UBRT10, WZS+11, WG16b, ZWC+19]. **gas-kinetic** [PZZL19, WG16b, ZWC+19]. **gas-liquid** [JHH+19]. **gas-particle** [WZS+11]. **gaseous** [Sza13b, Sza13a]. **gases** [BDP16, CGSB18, CND11, Gre18, SÓÓN11]. **GASPRNG** [GP13]. **gate** [MNW+17]. **gate-based** [MNW+17]. **gateway** [VK16]. **gather** [MTO15]. **gauge** [BB13a, BW12a, CB13a, CSBO13, Fri14a, HbotRC15, JL19, LSSW14, PVK+18, SV13, XQ19, YW17, MGS13]. **gauge-independent** [XQ19]. **gauged** [Fis12]. **gauginos** [Sta13]. **Gauss** [MSR10, MS15]. **Gaussian** [BCC+18, EKDGG15, Er14, FM12, JBKM15, LY16, Odr11, PPY14, Ray10, RVDS16, RDVS18, TZK16]. **Gaussian-inspired** [JBKM15]. **Gaussian-type** [BCC+18]. **GBS** [JHL+15]. **GCforce** [ZYL+19]. **Gd** [LQZ+13]. **GDB** [ZFR18]. **GDML** [PG19]. **Ge** [MTS+16]. **Geant** [Gri10]. **Geant4** [DPK+15, KB15b, MVI+16, PG19, PCEH15]. **Geant4-DNA** [DPK+15, MVI+16]. **Gebremariam** [CCK23]. **gen.parRep** [HL19a]. **GenASiS** [BC19, CB15a, CB17, CB18]. **Gene** [BW15, CRA10]. **Gene/P** [CRA10]. **gener** [CKFB12]. **General** [Bot12, ASPDL+16, AABC+13, AC15, AC18, CWJ19, CH11a, CPV13, CvW12a, CvW12b, EKO16, Fer15, Fuk17, GTPWL12, GJ14, GNA+15, GBRB11, Gri11, HRC11, JKG+18, KAK12, KMA+12, LS14, LS15a, Liu11, LW14b, LHGF18, LHG+19, LSSW14, MKV11, NMCR15, RFPM+17, Sal16, SS10a, TdAdSS11, sX14, YLTS16, Bre10, FGJB19, GLMG12]. **general-purpose** [ASPDL+16, AABC+13, Fer15, GNA+15, RFPM+17, TdAdSS11]. **general-relativistic** [KMA+12]. **generalised** [BBC+13a, Fuh15, TKJ19]. **Generalized** [ATW+19, JPH+14, NLSJ17, SVGS18, BDV11, Brá15, BKK13, BKM14, BK15, BK16b, CC16, DBB12, Ert15, Fen12a, Fen16, GV15, GS14, GTG+11, KVV19, KMM13, KMJS16, LJE11, LS12a, lLsSZ14, MBFD12, ICD13, PH11, PA13, RJLL16, RLM13, TC11b, VMGP+19, BD12, HL19a, MCGR11, MN16, Wil19]. **generate** [AM14a, ZLLP17]. **generated** [BD10, MVI+16, MSH11, MSS+14, VKS16, WSO+12]. **Generating** [Bjö11, CB13a, MMT+11, Mis12, WWR+16, AZ17a, AZ17b, KFF+16, Mis13, RM14, Rom15, SGDS16, WW12]. **Generation**

[CC10a, JTH14, ADT+19, BJBC+14, BS11, BS13a, BS14a, BJCW13, BL18b, Bor14, BGL+14, CF16, DCM+12, FMRP16, Fer15, Gio18, GB17, GBS16b, HBP+15, HMU10, MFLY19, MV11, DPHB17, PLF+17, Rei10, RJW+19, SG15, Sem16, VDA+19, XWhZ13, YFAT17, ZS13, vH18]. **GEnerator** [CF16, GAGW16, HS19, AFIS12, AOK15, AhPSV15, BCMS10, BCJW13, BBO19, CWW10, CUL+17, CK18, CI11, CK19, DIR+19, DKT14, GP13, Gin10, HLD13, Kas14, KRW13, KYKN15a, KYKN15b, MO14, NCS17, ÖY13, PHT+19, RVDS16, RDVS18, Sav15, Sha13b, Sha16, TU14, Tom16, XW15, YWW13]. **generators** [ASPW13, BS13a, CKS10, Dem11, MZ14, Mis13, SS13a, Sib17, SAE+16, TC11a]. **generic** [Ano10n, HL18, JJ15]. **genes** [SCW+11]. **Genetic** [SKH+10, SKK11, Bru13, Hon18, TTT16]. **Gennes** [SP18a]. **genuinely** [QSB19]. **genus** [Bog16]. **GENXICC** [WW13]. **GENXICC2.0** [CWW10]. **GENXICC2.1** [WW13]. **geodesics** [MG10a, Mül11a]. **GeodesicViewer** [MG10a, Mül11a]. **Geom** [CPCDdM18]. **Geometric** [KRK16, Bot13, Gwi12, KU10, MTO15, SKK11, TE18, TK19, VBMP15]. **geometrical** [BSC+13, HML11, QLE16]. **geometries** [Bjö11, CCD+16, EKK14, HC17, MJB+10, MVI+16, NCB18, PG19, RHH12, TS19]. **geometry** [ASPDL+16, BMU11, DXY+19, DPK+15, GLZ17, GSB+14, KAH18, KH12, KQYH17, LJZ+18, SR12, WWVB11]. **geophysical** [VKS16]. **George** [Sco19]. **GeoViS** [Mül14a]. **germanium** [OPSR13, OPR14]. **GetDDM** [TVT+16]. **GFM** [Jia18]. **GGA** [GSZ13]. **GGRESRC** [DKT14]. **ghost** [HAH13]. **ghost-gluon** [HAH13]. **GIANT** [JBKM15]. **Gibbs** [MHR+13, dlRL11, dlRAPL11, TKP15]. **Gillespie** [CF17]. **GiMMiK** [WWR+16]. **Ginzburg** [SA15b, Wan10a, WZ13]. **GISAXS** [BKN+17]. **glacial** [RTÅT15]. **Glass** [LRC+11, BL14, BPP11, LBP15, Yam16]. **glasses** [BW11, IZRT15, Krö19]. **Glasstone** [TZG12]. **glassy** [CH11b, Has11]. **GLauber** [BBRS19, RSBB14]. **GLISSANDO** [BBRS19, RSBB14]. **Global** [MTS+16, PPS10, WWM14, ADdM16a, ADdM16b, BY17, CDdM14, CJJ+17, DGS+19, FKL13, GAB+16, KTE+12, KHKR14, KTA12, KSYY13, LLQX19, LYP14, SK10, TBZ12, TMS19, VPP+12, VHP+15, WLH+12, WLS13, ZFR18]. **globally** [RC18]. **globular** [RV10]. **glsim** [Gri11]. **gluino** [AMRdA17]. **gluodynamics** [Fri10]. **gluon** [BBU11, BvH15, HLM13, HAH13]. **Gmat** [CNMC10a]. **GMES** [CKK+13]. **GMXPBSA** [PSMS14, PSMS15]. **GNU** [YSMA+17]. **GO** [BD12]. **Godunov** [KPPC13]. **gold** [TM19, YLYL17, ZDD+13]. **Golem95C** [CGH+11, GHvSF14]. **good** [MA11, TC11a, YZ16]. **goodness** [Gag12b, GH18]. **Gordan** [HR11]. **Gordon** [DN13, KZC+10, AH13, DG10a, DG10b, Eba13, GMHZ19, JPM12, LD10a, MD10a, Pál12, PTS12, RM10a, SW14c, dlHV12]. **GPELab** [AD14, AD15]. **GPGPU** [LYZ13, ÓN14, PQTGS17]. **GPGPU-accelerated** [PQTGS17]. **gprMax** [WGG16, WGG+19]. **GPScan.VI** [Fer15]. **GPU** [ALA+19, AKS17, BS14a, BWB+17, BKOZ16, BPP11, BFPP12, BBF+13, BBS14, BLS17, BD10, BVP10, BTL+17, Boe14, BTC+17, BHJ+19, CCLL18, Cap13, CMVRB+14, CMRVVR16, CHNS18, CCL18, CSSB15, CRLS18,

CBYG18, CRB+17, CLB11, DRR16, DS13a, DCVB+13, DCGG13, DGG13, ELDS14, ELL+17a, Exl17, FFT+14, FGC+11, FDWC12, Fil13, FBN+13, FOB+15, FKS+19, Gai17, GP13, GJ13, GLHG12, GZZ19, GHR+16, GB17, GCC+18, GJ18b, Ham11, HXW+13, HPN18, HLTW19, HW12, Ihn12, JK14, JPCG15, JXTS16, JCW+13, JWCW17, KKP11, KP12b, KPA+19, KO12, KO13, KO14b, Kom15a, Kom15b, KO16, KMA+12, LYP14, LCC13, LGW13, LSYZ12, LBP15, LWRQ16, Lut15, Lya15, MDW16, MÅWK18, MPM14, MFM15, MHR+13, MTM13, NHD16, Ngu17, OP12, PR14, PLD15, PBS+17, PKRS16, RD10, Sai10, SGNL17, iSYS12, Sie16, Smi16]. **GPU** [SKM15, TL17, TS19, TCCV18, TDL+14, TPC16, WXW14, WFZG19, WGG+19, Wei11b, WSH+14, Wil19, WC13, WAW14, XLX13, YHL11, ZSW+17b, ZPS+18, ZWC+19, ARYT17]. **GPU-accelerated** [ELDS14, GHR+16, TL17, WXW14, BTL+17, Cap13, CRB+17, DS13a, GJ13, Ham11, HXW+13, MHR+13, Ngu17, PBS+17, XLX13]. **GPU-acceleration** [GCC+18]. **GPU-based** [Boe14, CMVRB+14, FDWC12, JPCG15, KO12, Kom15a, KMA+12, LCC13, PKRS16]. **GPU-centric** [Sie16]. **GPU-code** [EZBA16]. **GPU-enabled** [ALA+19, LYP14]. **GPUQT** [FVH18]. **GPUs** [BL18a, Boe18, ACD+14a, AAT17, AEKO18, BS14a, BCDI12, CMRVVR+14, CB13a, CSBO13, CWY+17, CBB+10, CSV+18, CH11b, CBB14, Dat13, Dem13, DSP15, ECD+10, FGG11, GNA+15, GNP19, GJB11, GM18, HTJ+16, HAH13, HLZ+13, LQ18, sLqSqL+13, MR14, Maz13, MRSD15, MKB+11, ÓN12, PVK+17, RK19, SV13, SÓÓN11, SAN18, TK14a, TCP13, WXW13, WAHL13, WRR18, WWM14, YL12, YBK+11, YBNY13, ZBN+19, dJBIM16]. **GPUs-The** [HLZ+13]. **gpuSPHASE** [WMRR17, WRMR19]. **GR** [OK12, OK18]. **Grad** [HS14b, SVS19]. **GRADE** [MD19]. **gradient** [AG12a, CR12, EFK+19, HbotRC15, HKVR10, JHL+15, KN13, SEGP15, WX14, ZY19b, ZYL+19]. **gradient-based** [HKVR10]. **grading** [vSGB+18]. **GRADSPMHD** [VKP14]. **grain** [BDL+19, LFKD18]. **grained** [AGVP10, AMJ18, Bru13, ESM17, FPY+17, NLB+19, PA13, SM19]. **graining** [GB11, HJE+19, MNL19]. **Grand** [AS16, PLCC12, Sit18]. **Grand-Canonical** [AS16]. **grand-canonical-like** [PLCC12]. **granular** [CNS+18, GTPWL12, KPPC13, RU12, San11]. **graph** [ÁSTT16, AOK15, Bor14, SSBS15, TMS19, ZLLP17]. **graph-theoretic** [SSBS15]. **graphene** [CW16, FUSH14, GZL14, Ihn12, KLKR11, LHSL14, OCL+13, RE19, RFSF18, STT11, SPY11, SWL11, TMA+15, WQ18]. **graphic** [Fil14, GLB13, RPL+14, RLMGM+11]. **graphical** [CF16, DS11a, GWM13, GLR17, LAS+17, TUY15, Zlo13]. **Graphics** [Dem11, APRG11, BdVGS11, BK11a, BHS18, BJCW13, CDS13a, Col14, DBDP12, DF13, FSH13, FUSH14, FCVH17, FVH18, FZY13, HAN+16, MED11, MEM+11, NPAG11, PLD+13, Rap11, SH12b, TD11, Tic10, TB14, WDL11, WWFT11, Boe18, MSML10, YLO13]. **graphics-processing** [MED11, Tic10]. **graphite** [CCL15, WWL11]. **graphs** [BBW11, Bor14, FRW17, Kan18, MKMK10, MKV11, SI11]. **Grasp** [JGB+13]. **GRASP2018** [FGJB19]. **gratings** [CZL+11, FBN+13].

gravitating [MT13]. **gravitational** [Cro16, GCC+18, KM10, PMS+15]. **GravitinoPack** [ES16]. **gravitons** [AAB+10b]. **gravity** [ACML11, BL19]. **Grazing** [MPSV15]. **Grazing-incidence** [MPSV15]. **greedy** [SJ17]. **Green** [Ano20, AK13b, CYOS19, JLM18, KK16a, KDM11, Liu13, PLF+17, Pla16, SGSG19, WAHL13, XD13, XHD15, YOM+19]. **Greenwood** [CKT17]. **Grid** [KK14b, ACMM19, BH17, BPSS18, BAR12b, BOGL17, CBGY17, CB16b, DF11a, DCU+19, FZY17, GBN17, GXF+15, GLHG12, HP14, HvAS+13, HZW+16, HKK11, KDP+14, KK14a, KKL+18, KV10a, KRB19, LWRQ16, ME18, NVW+13, PHT+19, RC11, Ser17, TH17, TIMM13, WRFS15, WQ18, YRR13, ZS13, BCJ+11, LHL11, MLR10, MWL+10]. **Grid-based** [KK14b, KK14a]. **grid-computing** [KDP+14]. **grid-convergence** [CB16b]. **grid-resolution** [CBGY17]. **Gridless** [BCDP18, OCF10]. **gridlock** [wH15]. **GridMD** [MV11]. **grids** [ALA+19, BHS15, Cha19, DJ11, DHS14, FRFH10, GN14, GSKM14, HWS16, JBG+16, JBG+17, LYP14, LHGF18, MTO15, Sch18, SC15, SHL+11, TK19, YJK11, ZNT15]. **GriF** [MLR10]. **GRLW** [MM10]. **GROMACS** [PSMS14, PSMS15]. **GROMOS** [SCC+12]. **Gross** [ABB13, AD14, AD15, ABDR17, CR13, JCL+18, KYSV+15, LBB+16, LYSS+16, MGL13, MGL16, SSB+16, VDAH16, VVB+12, YSVM+16, YSMA+17]. **ground** [CR13, ELL+17a, JWL13, MH11, WX14, WGG16]. **group** [CLKK11, FSC13, Fon12, HB12, JC16, KK16b, LSSW14, MK19, MSHLS15, MSHL17, NBN+14, PO14, RGH10, Roh16, Sta11, Trö11, Ver16, WPAV14, ZAHA10, LSR+17]. **group-correlations** [CLKK11]. **group-theory** [ZAHA10]. **groups** [Nik12b, SK10]. **Grover** [LYZ13]. **GROW** [HKVR10]. **grown** [RDP14]. **growth** [FBG10, JEFP14, JK19, LLSK17, LRSS19, MÅWK18, MS11, RH11, SÓÓN11, ZKG+18]. **GSGPEs** [CR13]. **GTROTA** [BSM13]. **Guadua** [VLM11]. **GUI** [Gio14b, Nov17]. **guide** [Hah12]. **guiding** [Nis11, PCGM14]. **guiding-centre** [PCGM14]. **GUIMesh** [PG19]. **guise** [ZF15]. **Gummel** [PFFK19]. **GW** [DdJC+19, DSLP11, KMM+19, KOK17]. **gyro** [SKK17]. **gyro-kinetic** [SKK17]. **Gyrokinetic** [DXY+19, KGG+16, DJ14, GAB+16, HKJ+12, JBG+16, JBG+17, KS16b, KH12, MIW+12, MIW+13, MWI+19, MKR+12, PDJ10, SISW10]. **gyrokinetics** [DGS+19, ZW15]. **GYSELA** [DGS+19].

H [BL18a, KKSY18, PCEH15]. **H-COUP** [KKSY18]. **H1** [GRZ10]. **H2SOLV** [PZY16]. **H5MD** [dBCH14]. **Haar** [Jiw12, KMM13]. **Haas** [RJ12]. **Hadron** [BSW12, ACD+14a, AHH+19, BDC+14, BHZ13, CCN17, CM14b, DDKM15, Gao13a, GLS+13, Gri10, OK12, OK18, SZY+12, SZY+13, ZYL+15, Tom16]. **hadronic** [CWW10, CWW15, CPWZ18, GLPQ11, KKK+15, VS19b, WW13, ALL+11]. **hadrons** [Kol15]. **hadroproduction** [WW14]. **haggies** [Rei10]. **Haldane** [BDK11]. **half** [HM12c]. **half-integer** [HM12c]. **Hall** [VPM12]. **Hall-driven** [VPM12]. **halo** [JH11]. **HAM** [ZLL13]. **Hamiltonian** [ART17, Alv12,

CWJ19, CYSL12, CSJ+17, Chr18, CKCS13, DPB16, Gar19, LV14, MBFD12, DPHB17, SP16, SEGP15, SLR16, USOA13, Vit19, WXL13, YZ16]. **Hamiltonians** [BM16, CNMC10b, HHC16, LJB+16]. **hand** [STK10, TKS10]. **Handheld** [CDSG11]. **handle** [CBB14, Var16]. **handling** [HL18]. **Hankel** [JL12, SPS10]. **Hard** [BDP16, AIG16, CND11, FBP+14, LDW13]. **hard-core** [CND11]. **hard-spherocylinder** [FBP+14]. **Hard-wall** [BDP16]. **hardware** [BdVGS11, RLMGM+11]. **Harmonic** [BD14, ABRS19, BDP16, BDV11, GKM10, GSMK17, GBSY18, HLLH16, LLP15, sLqSqL+13, ME18, MBGK11, MGK13, dlRL11, PSL+17, SDM+12, SDS+17, SS11a, SMGK14, SSK+13, TVT+16, VB19]. **harmonic-oscillator** [GKM10, MBGK11, MGK13, SDM+12, SDS+17]. **harmonics** [ASS13]. **Harness** [KBT+14]. **Hartmann** [ZOZ13, ZNT15]. **Hartree** [PSL+17, SW14b, SDM+12, SDS+17, SSK+13, ZF16, BM16, BMW14, DG10c, Fro11, GBD10, JZZ+19, Kob13, KS12, OT11, SEW12, SEW14, ZYZ15]. **hase** [SKB10]. **HASEonGPU** [EZBA16]. **hashing** [JWM+18]. **Hastings** [GM14, MP11]. **Hastings-class** [MP11]. **HATHOR** [ALL+11, KKK+15]. **HAWK** [DDKM15]. **HDECAY** [CGG+14, DKMS19]. **HDMR** [LLX14b, LWL12]. **heart** [ZBMM11]. **heat** [CB15b, CZF18, DBMR18, Fri10, Gor19, HWS16, JYPA18, LWZ14, MLS10, MK10, iSYS12, SR12, SN16, XZF12, ZMCT12]. **heat-bath-inspired** [Fri10]. **heating** [BB13b, JGC+11, MTM14]. **Heavy** [ALL+11, LCL+11, BKMP16, BG14b, CWW10, CKFB12, CCN17, HLM17, JuIAM16, KHB14, MMT+11, SKK+19, Sha13b, Sha16, SQS+16, VS19b, WW14, WW13]. **Heavy-baryon** [LCL+11]. **heavy-ion** [SQS+16, VS19b]. **heavy-quark** [CCN17]. **heavy-top** [HLM17]. **Heine** [GLX+14]. **Heisenberg** [BPP11, HvWT17, KGNS10]. **HEJ** [AHH+19]. **HELAC** [BCG+13, Sha13b, Sha16]. **HELAC-NLO** [BCG+13]. **HELAC-Onia** [Sha13b, Sha16]. **helical** [LFG14]. **helices** [HFSK12]. **helicity** [CKJR11, dALM+12]. **helicon** [ML14]. **helium** [CHH+11, LB11, LB12, Miu11, SQA+15, WFM14]. **helium-4** [Miu11]. **helium-like** [LB11, LB12]. **Helmholtz** [CC10b, CC12, OK14]. **helper** [WMK11]. **hemodynamics** [GVR19]. **HEP** [CMSV14]. **HEPMath** [Wie15]. **HepML** [BDKS10]. **Hermite** [CDBM16, GMHZ19, LDF+16, PDRG10]. **Hermitian** [BW12b, CDMCN11, JK13, LWW10]. **HERWIG** [KRW13]. **heteroepitaxial** [Dan14, Dan16, Dan17, Dan19]. **heterogeneous** [CF17, DCVB+13, FKS+19, GXF+15, LSG+12, LSYZ12, MPM14, San11, SCJH19, TKP15, VLPPM14, XLX+15]. **heteropolymer** [Fri17]. **heteroscedasticity** [ICPD16]. **heterotic** [NRSVW12]. **Heuristic** [CNMC10a]. **hex** [BH16]. **hex-ecs** [BH16]. **hexagonal** [CCL15, KLO+19, TMA+15, VLM11]. **hexahedral** [FXZ+14]. **HF** [RHBH15a, RHBH15b]. **hfbtho** [PSL+17, SSK+13]. **hfodd** [SDS+17, SDM+12]. **HFOLD** [FEH11]. **HIBRA** [JuIAM16]. **hidden** [KZ11]. **HidSecSOFTSUSY** [KZ11]. **hierarchic** [CHDF10]. **Hierarchical** [Hoh18, Roh16, CB15c, DAW+19, KN13, MCWJ15, OKM12, QJF16, ZMvE+13]. **hierarchical-gradient** [KN13]. **Hierarchies** [JJB11].

hierarchy [GGG+19]. **Higgs** [EMW19, ERS10c, Ore19, AC17, BGM+14, BM19, BBH+10, BBH+11a, BHZ13, CGG+14, DDKM15, DLM18, ERS10a, ERS10b, FEH11, HP17, HLM13, KKSY18, MGS13, SAE+16]. **Higgs-mass** [HP17]. **HiggsBounds** [BBH+10, BBH+11a]. **High** [AAA+16, AQJ10, AHH+19, Ano19m, BG19a, BCT17, BvH15, CLHL19, Ein16a, GS15, Gai17, GBFJ14, HS19, HvWT17, JTW+17, LWL12, LSR+17, MF17, MD10b, ML16, DPHB17, NS15, NO12, PHA18, RHW+12, SSH+13, SA15b, SBPD19, SMGK14, TY10, WGVPL17, ZBN+19, AAD13, AAD14, Ara14a, Ara14b, AH13, BDT15, BL19, BDKS10, BH14a, BCH17, BCDP18, BWPT11, BKPT12, BY13, BMG+15, BDGM+17, CFMR10, Cap13, CNS+18, CZ18b, CMJ+11, CD12, CL15b, CR12, CBGY17, CBYG18, DBMR18, DGPW11, DRR16, DJ11, DM17, EZBA16, ECD+10, EGT+18, FTI18, FG13, Fu19b, FB19, GLAC13, Gar19, GA10, Hah12, HEPW13, HYM11, JH11, JVR12, KB19, KVV19, Koh15, KSYY13, LV15, LM16, LWZ14, Liu15a, LJD+19, LWJV18, LAG+17, LLX14b, MMO+17, MTE17, Maź19, MHWH19, Mil16, MVS15, MLK+17, MLK+19, MNOØ11, PE17]. **high** [PVK+17, PGO17, Qia10, RRCSCJ10, RLS16, SHW18, Sch14b, SHZ13, SLK19, SCNJ18, SCM+18, SPSP18, Tia11, TGH+16, TS10, VL19, VMGP+19, VV16, WWS10, WC10, WS11a, WWC+16, WvSL13, WLM14, Wie15, WWR+16, XHLUF+18, XQ19, YvOSM15, Zag14, ZD15, ZFH14, ZOZ13, ZZ17a, ZFZ19, ZW15, ZNT15, DBLF16, OBM19]. **high-** [CMJ+11]. **High-accuracy** [AQJ10, CLHL19]. **high-density** [HYM11]. **high-dimensional** [CZ18b, DM17, MHWH19, WC10, WvSL13]. **high-energy** [Hah12, WS11a]. **high-entropy** [PE17]. **high-frequency** [BDGM+17]. **high-intensity** [SCNJ18]. **high-level** [MVS15]. **high-level/high-performance** [MVS15]. **high-nuclearity** [DRR16, RRCSCJ10]. **High-order** [BCT17, MF17, MD10b, RHW+12, SSH+13, SA15b, TY10, ZBN+19, AAD13, AAD14, BL19, Cap13, DBMR18, DJ11, EGT+18, FG13, GA10, Koh15, LV15, LWZ14, LWJV18, Maź19, MLK+17, MLK+19, PVK+17, Qia10, Tia11, VL19, VV16, WWS10, WWR+16, XHLUF+18, XQ19, Zag14, ZFH14, ZNT15, DBLF16]. **High-performance** [GS15, Gai17, JTW+17, LSR+17, DPHB17, Ara14a, Ara14b, FB19, MVS15, SHZ13, VMGP+19]. **high-precision** [BDT15, KB19, LM16, SLK19]. **high-pressure** [SHW18]. **High-resolution** [PHA18, BMG+15]. **high-speed** [CNS+18, VL19]. **High-temperature** [HvWT17, Liu15a]. **high-throughput** [ZZ17a, ZFZ19]. **high-velocity** [JH11]. **Higher** [ABdA15, CD15, KO14a, WP10b, ACDdM15, Cha16, CLJ12, DKOS14, MK19, MO14, SR12, SC16b, SB11, VJC12]. **Higher-order** [CD15, KO14a, Cha16, MK19, SC16b, SB11]. **Highly** [CH11b, HLTW19, LBP15, MTM13, MGR16, PFFK19, dSF18, BL19, BY17, GRLS18, HBP+15, MSI+10, MLS10, SEW12, SEW14, WQ18, WDR16, YBNY13]. **highly-efficient** [WDR16]. **Hiking** [Brá15]. **Hilbert** [ERPDFLS15, SA15a]. **Hilliard** [LLXK16, XYZX19, YZ19]. **Hirshfeld** [EPP12]. **histocompatibility** [HFSK12]. **Histogram**

[FLE19, CMRVVR+14, CMRVVR16, GGG+19, Sha18, VK14].
Histogram-free [FLE19]. **histograms**
[AMR15, Gag12b, Gag12a, GH18, GHN19, RK19]. **Hitting** [KMS19]. **HMC**
[CDS+13b, KP12a]. **HNLS** [SB11]. **HOC** [TY10]. **hole**
[DIR+19, Dua12, Gin10, LZL11]. **Holm** [ZST11]. **hologram**
[BGL+14, JTP15, MSS+14, WSO+12]. **holograms** [BD10]. **holographic**
[FBN+13]. **holography** [MSI+10, ZSW+17a]. **HoMnO** [KAR+15].
homogeneous
[Asi10, BK11b, MSHLS15, MSHL17, PN15, SCNJ18, SLEF17, vMB14].
homology [DS13c]. **Homotopy** [CS10, PSBT12]. **honeycomb** [MHHL11].
Hooke [RGKR17]. **Hopf** [Bor14]. **hopping** [LM19]. **horizontal** [ME18].
Horn [BKM14, BK15]. **Horn-type** [BKM14, BK15]. **Horner** [KPVvdH13].
HOS [DBLF16]. **HOS-ocean** [DBLF16]. **Hoshen** [FKH15]. **hosphe**
[CDTV10]. **HOTB** [GSMK17, SMGK14]. **Houches**
[ABB+14, BBC+13a, MHA+12, Sta19]. **Householder** [NLSJ17]. **HP**
[LWL11, Roh16]. **hp-fRG** [Roh16]. **HPAM** [EPP12]. **HPC**
[DdJC+19, CCdC+11, GBK+12, HL18, OLG+16]. **hPIC** [KC18]. **HPL**
[Maî12]. **HRMC** [MHV17]. **HRMC_1.1** [OPO+11]. **HRMC_2.0** [OPSR13].
HRMC_2.1 [OPR14]. **HTC** [CCdC+11]. **Hubbard**
[KLO+19, MHHL11, SA15a, SH12b, US16, WDL11]. **Huge**
[WSI13, BMC+11b]. **Huge-scale** [WSI13]. **Hut** [WSH+12]. **Huygens**
[VLZ17]. **Hybrid**
[BCTP18, GJLB12, KSS18, LRW+15, ML17, OPR14, SSB+16, SS11b, TH17,
VCMS+13, WDL11, WLZN17, YHL11, dlRM18, AAD14, BMC+11a, BD12,
BT17a, BWPT11, BKPT12, BY13, BMDP19, CW16, CL13, DCU+19, ES11,
FGR14, FKS+19, GWL+17, GC12, Giu19, Gwi12, HLW16, JTN+11, JL19,
Jiw15a, KK13, KKL+18, Krö19, KCS+15, LCY+11, LHC+13, LHH+12a,
LSYZ12, MIW+12, MM17, MKU+12, MSM+11, MJKB18, PZZL19, RTT+18,
SZ15, SP18b, SS13b, SPS10, SYE+18, SGSG19, TFBW14, WLGY18, WC13,
WAW14, YvOSM15, YLQ+17, YXT+15, ZC12, ZBN+19, GBR+14, HKZN17,
HKZN19, KLO+19, OPO+11, OPSR13, Urb18]. **hybrid-node** [ZBN+19].
Hybrid-optimization [WLZN17]. **hybrid-stabilized** [JTN+11].
hybrid-symbolic [SZ15]. **hybridisation** [SKFP16]. **Hybridizable**
[SVS19, HLLH16, LLP15, LLMW17]. **hybridization**
[AK13b, HWG13, SGW17, VPP+12]. **hybridizations** [SGW17]. **hybridizes**
[LM19, YLYL17]. **hydrate** [MD19]. **hydraulic** [WNYP17]. **hydraulics/fuel**
[YLL+19]. **Hydrodynamic**
[MOD13, BOGL17, GZW17, KHB14, LCH11, LKW11, WSH+14, ZD15].
hydrodynamical [NAQ16, QA13b]. **hydrodynamically** [APC+14].
Hydrodynamics
[CDR+15, FHTO17, GRLS18, KS16a, DCVB+13, DCGG13, EKK14, GLB13,
GCH+18, HLS+17, HPN18, JXTS16, KPPC13, MRSD15, NFS15, RH17,
RTA10, SC15, SC16b, SN16, WRR18, YK19, dASJC+19, dlRM18].
Hydrogen [WBY11, BP12, BH14a, BH14b, BH16, BKS15, CLHL19, JTT11,

LH11, MFS10b, SW14a]. **hydrogen-like** [BP12, MFS10b]. **hydrogenic** [PG10, Sar17a, Sar17b]. **Hydrokinetic** [MBS+10, BBF+13]. **hydrothermally** [CLY11]. **Hylleraas** [JH15]. **Hyper** [GGF+13, GES13]. **Hyper-Fractal** [GGF+13, GES13]. **Hyperbolic** [AOK15, AAD14, BB10, CGM17, DJ11, Ert15, Jiw15b, PKT15, RD10]. **hypercubes** [TOB+14]. **HYPERDIRE** [BKM14, BKK13, BK15, BK16b]. **hyperfine** [ZE11, ZE16]. **HYPERgeometric** [BK15, BKK13, BKM14, BK16b, GS14, HL13, HM12c, BKK13, BKM14, BK16b]. **hyperlogarithms** [Pan15]. **hypersonic** [BTC+17, PBD+15, TIMM13]. **hyperspherical** [AV13]. **HypExp** [HM12c]. **hypotheses** [Zlo14].

i-PI [CMM14, KRM+19]. **I.V.P.s** [RL10]. **I/O** [BABC19, DRUE12, GGI+13]. **IAST** [SSH16]. **IBAR** [Cas12]. **IBM** [CRA10]. **ICC*** [KSH11]. **ICCG** [PYW+14]. **ice** [HYM11, IUM13, RTÅT15, TS10]. **ICSM** [BBL+13]. **Ideal** [SSH16, ZFZ19, ALA+19, LOL+18, PE15, TDL+14]. **IDEN2** [AKV18]. **Identification** [BGHN19, AKV18, Bin13]. **identify** [PLD15, VBMP15]. **Identifying** [Law19, LZ12, Kra10]. **identities** [LL19]. **IDSOLVER** [GJ14]. **iEBE** [SQS+16]. **IEQ** [XYZX19]. **IFE** [RtV16, RtV16]. **IGA** [LWP+17]. **iHixs** [DLM18]. **II** [RHBH15a, Ano11a, AD15, ABH+19, BJBC+14, BH14b, BMW14, BAK+16, Dan10b, HBS+11, Nog17b, dlRAPL11, RHBH15b, SH18, SAS11, SSK+13]. **III** [PSL+17]. **illustrating** [ZW15]. **illustration** [CLB11]. **Image** [DGPOR18, iSSMI11, GES13, JTP15, LAS+17, TW15, XD13, XHD15]. **ImageJ** [SBB+17]. **images** [AKKK16, CRB+17, GFB+10, PVH+17, WG16a]. **Imaginary** [LR13, LR16, ABDR17, CYOS19, YOM+19]. **imaginary-time** [CYOS19, YOM+19]. **imaging** [CFCB12, Fer15, GSB+14, SSM+17]. **imbalanced** [WRB11]. **imbibition** [GTSL+13]. **imbibition-drainage** [GTSL+13]. **Imeall** [LFKD18]. **IMEX** [DMP18]. **IMEX-trigonometrically** [DMP18]. **immersed** [CCHL11, CGJ14, JvOK17, NCB18, Ser10, YS17]. **impact** [CCLL18]. **impedance** [KM17]. **Impingement** [LNSD15]. **impinging** [HHT14]. **implants** [RMS+12]. **implement** [MRL18]. **Implementation** [AS16, Alv12, BKOZ16, BDPM15, Boe18, BF10, DPK+15, GSZ13, GZZ19, GGG+19, GES13, GFJ+14, GBJ+19, HP17, IIO16, IFOI18, KH19, LLG17, MWI+19, MPB10, MFG+13, MBGV15, NBN+14, RV10, REBS16, SSX14, TIM+16, VDB14, WP10a, ABRS19, Ara14a, Ara14b, AKS17, ADdM12a, APC+14, Bad11, BJCW13, BCJW13, BH16, BVSG19, BW15, BG14b, BENK+17, CKT17, CFCB12, CL15b, CGJ14, CGG+14, DEMM19, DA16, DCVB+13, DM12, FGC+11, Fow18, Fri14b, FHH+14, FKS+19, GS17b, GS17a, GVS+15, GHBL18, GB17, HWG13, HFOPF15, HL19a, HLZ+13, HDM+12, JWJL12, JK14, JWCW17, JJ15, JKIS16, JP10, KFS17, Kap12a, KKG+15, KBSP19, LKM+16, LBM+14, LHZ11, LK15, MBF+10, MSS+16,

MTM13, MNPF17, MBB+19, MAIVAH14, NPAD11, ÓN12, dlRAPL11, PBMAD12, PM16, PMS+15, PIH11, QLE16, RRCSCJ10, RU12, SL16].
implementation
[SCC+12, SSF+17, SBPN15, SLK19, Smi15, TKP15, TL19, TS19, TTT16, US16, VS19a, VB19, WMRR17, WRMR19, WC15, WPAV14, ZMJ13, vRWS14].
implementations [CSV+18, DCGG13, HSK+12, Hol19, THJ+10].
implemented [FVH18, MOD13, PGD17, SS18]. **Implementing**
[BWPT11, BKPT12, BY13, QJF16, BF16, BCPS11, MJKB18, SOPS12].
implements [MZE13]. **implications** [PdMML19]. **Implicit**
[FLSZ13, FM15, GHBL18, GHMB+19, Lan13, TYH+15, VL19, ALA+19, BB12, BF10, CZD15, CDBM16, CC14, CC15, CW16, DBMR18, FZR19, GZZ19, HCHW11, IBP+15, JCL+18, KKG+15, LOL+18, LST15, LHH+12b, MIW+12, MWI+19, NFD+19, NLSJ17, RC15, SS13b, SC15, SHL+11, TT14, WG16b, XWF18, XYK12, XZ12, YSLY19, YLKN17, ZSW+17b].
implicit-explicit [CW16]. **implicitly** [WWS10]. **implosion** [SKK+19].
import [PG19]. **importance** [HLL13, KTB17, LLX14a, SK10, dHGCS11].
important [rJmYT11]. **Imposition** [MDPTTC17]. **improve**
[FZ16, SCM13, WW12]. **Improved**
[AK13b, BKC+17, CZL+11, GV15, Jab13, KCT15, KO16, LRK13, NNWS15, RGH10, SSF+14, WMK11, WPD+15, ADdM16b, BW15, CKLM10, CDdM14, GCF+17, GST12, KHK+11, KDM11, KPPC13, LJD+19, MGO13, MS14, MBFB13, MFLY19, Nat09, Nat10, RLS16, RJLL16, SWL+15, SD10b, TD17, WZS+11, WW13, War16, XD16, vdSM16]. **Improvement** [ADdM16a].
Improvements [PLF+17, SSS+11, DSS+19, Tan19]. **Improving**
[AKK+18, ADdM15, HHC16, KPVvdH13, SGM11a, SGM11b, CMRVVR16, KK17, Pit10]. **impurity** [BHT19, FLSZ13, GWF+11, HWG13, HWM+15, Hua17, SKFP16, SGW17, YWOD19]. **IMT** [MN10]. **in-core** [AZM14].
in-situ [KY14]. **InAs** [BMNS14]. **incidence** [BMF+19, MPSV15, VDB14].
Including
[AB10, EFG+10, DXY+19, PS12, WT12, XGH+19, ZMCT12, dTOV18].
Inclusion [RU12, AMRdA17, TKJ19, UIY11]. **inclusions** [Bot13]. **Inclusive**
[DLM18, GLS+13]. **incomplete** [LHJZ10]. **incompressible**
[BLAS19, BCM+16, CC16, DBMR18, EW14a, GZW17, KGFS18, Ki10, Koh15, Kra18b, LOK+18, LH18, LWJV18, NHSY15, RH17, TKJ19, YTYA17, ZBN+19, CRLS18, GRLS18]. **incorporated** [AM14b]. **Incorporating**
[KZ11, NLB+19, LYZ13, TKP15, WN10]. **incorporation** [CL11].
independent
[EGT+18, Ein16a, HO13, Les16, LLX14a, SMC+17, XQ19, ZKS13, HSD17].
index [ICPD16, SAA+10]. **India** [BPMM14]. **India-based** [BPMM14].
indices [KTA12, SK10]. **Indirect** [BBB+11, Ham11]. **individual**
[HFOPF15]. **individual-based** [HFOPF15]. **induced**
[Gao13a, HYM11, LS17a, San11, SJY18, SJY20, Van15, WL11b, ZLM12].
induction [VMGP+19, YTYA17]. **inelastic** [ASEA14, TVGB15, WFDK19].
inertia [DBP19]. **Inertial**

[JFHA19, HJL+14, LHJ+15, MJKB18, SKK+19, SS11b, RtV16]. **inexact** [RLM13]. **Inference** [dCD19, CRB+17, KD16, KRB19]. **Inference-Aware** [dCD19]. **INFERNO** [dCD19]. **INFFTM** [CZ17]. **InfiniCharges** [SGDS16]. **infinite** [SBH+12, ZLL13]. **infinitely** [BAF18]. **infinity** [SS10b]. **inflation** [HCC14]. **Influence** [BL14, OML11, ZHCR18]. **Information** [CLKK11, CDL+12, EBDM17, Fri14b, HFSK12, LTL+12, OG14, OO15a, Sai13, mZfXL15]. **infrared** [Gar19, SC16a]. **infrastructures** [GBS+16a, VPMVH+17]. **InGaN** [YSN+14]. **InGaN/AlGaN** [YSN+14]. **Ingólfsson** [BL18a]. **inhomogeneities** [PP13]. **inhomogeneous** [MCM+12]. **Initial** [BBRS19, OK12, RSBB14, FBG10, GN14, Jan10, KAS12, LLL12, LW14b, SS13b, SS10b, VSG18, ZX10, vH18]. **initial-boundary-value** [GN14]. **Initial-State** [BBRS19, RSBB14, OK12]. **initialization** [BDBV12]. **initialize** [BMS+16, LHG+19]. **initio** [APS+16, BW16, BKS15, CMM14, CJJ+17, DA16, DML+16, LOK+16, Maź19, MLK+17, MLK+19, NSH+19, QZ19, RH11, SXW+18, WJCZ18, WQ18, Wil15, Wit14, WPAV14, ZFBR11, OBH10, TG11]. **ink** [BLV+19]. **innovative** [PNL13]. **inpainting** [JTP15]. **Input** [CMSV14, RJW+19, Rut18, SOJ14]. **Input-output** [CMSV14]. **inputs** [CSRV13, HLL13, ZKS13]. **Insertion** [Ros16]. **insightful** [SDL+16]. **inspired** [DS13c, Fri10, JBKM15, Nut14]. **instabilities** [ML17, PHT+19, sX19]. **instability** [CHA11, Dua10, GV15, HZW+16, LYX+17, LKW11, SCM+18, WG12, XYM+13, YXD+15, YXT+15]. **instance** [NB17]. **instructions** [WN19]. **Instructive** [Nem16]. **Instrumentino** [KSH14]. **instruments** [KSH14]. **insulator** [CJH11]. **insulators** [BMZ+18, PSP16]. **integer** [HM12c]. **integrability** [ACDdM14]. **Integral** [Smi15, ASEA14, Boy15, CMM14, Dat13, DG10a, GJ13, GHvSF14, KO14a, MUU18, MNV13, ML14, Miu11, Qia10, RGKR17, Smi16, Stu10, WFM14, ZBG+16, ZDWM17, ZWLZ17]. **integral-equation** [ML14]. **integrals** [AG12b, AM17, ACDdM14, Bog16, BBH+18, BH13, BCH13, BHJ+15, BHJ+18, CEZ16, CGH+11, GBN17, GLZ17, GM17, JH15, JZZ+19, Kap12b, KCT15, KK14a, Mey18, Pan15, Pat15, Pat17, PB13, Pra17, RMW13, RZ19, TO10b, WISA11, dDYK+18, MN16]. **integrand** [Per14]. **Integrated** [JGC+11, NBW16, AKH+18, Ano10n, GGI+13, GC12, MNL19, RB18]. **integrating** [Bot12, dlHV10]. **Integration** [MAIVAH14, AK13a, ABH+19, BKV16, BE14, CH19, CCK23, End11, GDB10, GJ18b, Kan14, Kap12a, KD17, MWI+19, MF17, NPAD11, Odr11, Pan15, RBB15, SHT18, SS13c, SBL16, WAHL13, Wu10, YWYF09, ZF15]. **integration-by-parts** [Kan14]. **integrations** [Lan13]. **Integrator** [VBC+12, BBB+19, BHJ+19, CEP18, KRK16, PIH11, Tan19, Ume18]. **integrators** [AEKO18, BCT17, Cap13, KV10b, MHWH19, Miy15, MO14, SBPD19, WYSW10, YZWR14]. **Integro** [DSW15b, GJ14, MJB+10]. **Integro-Differential** [DSW15b, GJ14, MJB+10]. **Intel** [BBS14, Lya15, NBW16, RJKC16, YSMA+17]. **intelligent** [LWL12]. **intense** [GH15, JTT11, MiH12, ÓN14, TC11b]. **intense-laser-driven** [MiH12].

intensities
[Dan10a, Dan10b, Dan14, Dan16, Dan17, Dan19, Hei12, ARYT17]. **intensity**
[Dan11, MSPD12, SCNJ18]. **intensity-energy** [MSPD12]. **inter**
[HB13, KK17, PZL+19]. **inter-cycle** [PZL+19]. **inter-particle** [KK17].
inter-polyelectrolyte [HB13]. **Interacting** [ATW+19, Cas12, APC+14,
CvW12a, CvW12b, Fil14, HL19b, LJSW11, LSR+17, LKT+16, MBFD12,
PFA+15, RS12, SSF+17, TD17, TKZ18, UKKB19]. **Interaction**
[BF16, BM13, BL14, BSC+13, CSJ+17, CL11, CUL+17, DCU+19, Gai17,
GC12, Gar19, GBD10, GC10, GC13, GC16, GC18, GCK19, HMR+19,
HRC11, IKS19, ICPD16, KPST15, LB13, MPS13, NS11b, REtVH12, RE12,
Sar17a, Sar17b, SS14, SAY+18, TJH17, Yan11, ZZ15]. **Interactions**
[KC18, BBL+13, BCH11, CCGC13, CB16b, Cro16, ERP+12, Fil13, FZY17,
FN17, Gao13a, GM16, GBJ+19, HCSW10, KMO19, KGFS18, KMD12, KM17,
Kra17, Kra18a, LSDD14, LH18, dlRJL14, Ots11, PH13, Tan19, TMA+15,
TRN16, TT11, YLQ+17, ZE11, ZE16, ZHPS10]. **Interactive**
[KY14, Gio14b, MMC10, TL17, KST+14b]. **interatomic** [GD14, LYJH19].
interchangeable [ZMvE+13]. **interdiffusion** [CHDCJA17]. **interest**
[OK10]. **interesting** [MN10]. **Interface** [LZ17, ABB+14, Ano10o, BPML12,
BB13b, CMM14, CSPAD10, CF16, CCHL11, DNP+12, DPW16, EW14b,
FLSZ13, GWM13, GLR17, HHP+16, KDP+14, MZ14, Nov17, PHA18, TM14,
Uty14, WMK11, XNK+16, XD13, XHD15, zYCG+18, ZMvE+13]. **interfaced**
[BHJ+19]. **interfaces** [KRW13, KMJS16, NPM16, PR10, RH11, ZFBR11].
Interfacial [HLS+17, SPTPR19]. **Interfacing** [MHA+12]. **interference**
[FNPMB10]. **interior** [HLW16]. **interlaced** [CMdB11]. **intermediate**
[CYOS19, vMB14]. **intermediate-representation** [CYOS19]. **intermetallic**
[DMC+15]. **intermolecular** [KHKR14]. **internal** [BHH+10, BBH+15].
International [BCJ+11]. **Internet** [VDJ+11]. **Internet-based** [VDJ+11].
interoperability [GVPJ18]. **interoperating** [CCdC+11]. **interparticle**
[QLN14]. **interpolated** [FZY13]. **interpolating** [MCV18]. **Interpolation**
[HKJ+12, KMO19, Cha19, DG10b, GGG16, Jiw15b, PCGM14, RWKS15,
Sok13, UNK12, XLL15]. **interpretation** [HLL13]. **Interpreter** [ÜS18].
intersection [PC11]. **interval** [Zlo14]. **intramolecular** [VB19].
intranuclear [TB14]. **intrinsic** [Dev12, DMC+15]. **intrinsically** [CRNK12].
Introducing
[BHS15, CXH+15, HHS+10, LM16, MDGC+12, MCAdF14, dHGCS11].
Introduction [IBP+15, Bre10, SAC+15, TKR13]. **intrusive** [HHM+15].
invariant [MDHD18, QwWL+15, SMGK19, XYZX19]. **invariants**
[ADdM14, DdMN16, FWZ+12, Ver16]. **inverse**
[Boy15, CL15b, KL11, MW12, MK10, MD10b, WHB16]. **inversely** [KB15a].
inversion [CL15a, GWF+16, GCF+17, GST15]. **invert** [FZ16, RLM13].
inverter [CL16]. **investigate** [ABH+18, KFF+16, RDP14]. **investigated**
[CSL+13]. **Investigating** [ARAB+17, BG14a, TKJ19]. **Investigation**
[AM14b, CLY11, KK13, MDPTK15, MRVF13, vdS13, EEGW12, MSH11,
NS11b]. **inviscid** [LSK+13, TFBW14]. **involving**

[Cip13, GC13, Sar17a, Sar17b]. **ion** [BT17b, BB13b, BKN+17, CCL18, Gai17, GAB+16, JuIAM16, JGC+11, KHB14, KMD12, PCR17, PR14, SKK+19, SK12, SQS+16, SVG10, TXZL15, VS19b]. **ion-ion** [SVG10]. **ion-surface** [Gai17]. **ionic** [GR19]. **IONIS** [Hei12]. **Ionization** [JTT11, BPC12, BH17, Fri12]. **ionospheric** [KST+14b]. **ions** [BP12, HH11a, JTT11, KNS+17, Lit13, LB11, LB12, MCA17, MFS10b, NNWS15]. **IPEC** [HB13]. **i}QIST** [Hua17]. **IR** [War16]. **IR-improved** [War16]. **irbasis** [CYOS19]. **iron** [ALC18, BPMM14]. **irradiation** [MBRV+13, PCR17]. **irregular** [BS15b, RHH12, SSG+10, SSG+18, VHP+15, vdS13]. **ISDEP** [VBC+12]. **ISICS** [Cip11, Cip13]. **ISICS2011** [Cip11]. **ISICSoo** [BPC12, BPC13]. **Ising** [LWL11, BVP10, CB15d, IZRT15, KO14b, KO16, LBP15, MH11, NHD16, SMJ17, SLZ16, SW11, SSBS15, WWVB11]. **Ising-type** [SLZ16]. **islanded** [CLH+17]. **isobaric** [VK14]. **isochronous** [CWY+17]. **isoenergetic** [LBM+14]. **Isogeometric** [CdFDS16, LWP+17]. **Isolated** [GS17b, BC11]. **isothermal** [BO12, LBM+14, PBF+16, VK14]. **isothermal-isobaric** [VK14]. **isotope** [EJG+19, NGG+13]. **isotropic** [Asi10, BMBC+17, DRR16, LN16]. **ISPH** [CRLS18, GRLS18, KGFS18]. **issue** [SZY+13, ZYL+15]. **Issues** [KT12]. **ITER** [FBHB17, SCB+19]. **iterated** [Bog16, BB10, FR15]. **iteration** [CM10b, Kom15a, ZX10]. **iterations** [Ano20, KK16a]. **Iterative** [FN17, GB14, Kau13, TC12, BHVMH15, Bis15, DB13, Dua10, GWF+16, Hoh18, MCP+11, NLSJ17, RC18, SAY+18, Sza16, TVZ+15, VDB14, ZSW+17b, ZLL13, ZCC19, ZWC+19]. **ITG** [DXY+19, KQYH17]. **itinerant** [IUM13]. **IVPs** [PAS11, PS14]. **Ixaru** [Pat12].

J [BL18a, GBSY18]. **Jacobi** [HLW16, HM18, ZHC16]. **Jacobian** [CGM17, NCS17]. **Jacobian-free** [CGM17]. **jam** [MTSI11]. **Jamming** [CB15c]. **Janus** [BJBC+14]. **Jarzynski** [ON11]. **JaSTA** [HD17]. **JaSTA-2** [HD17]. **Jastrow** [MBGV15]. **JAVA** [PQTGS17, FLZ+18, HCRD14, HD17, JEC+12, Mar19, MB12, MCNRC16, Pos19, VSG17, ZXL16, ZZD+16]. **Java-based** [MB12]. **Java/Scala** [Pos19]. **Jaynes** [KAvdL11]. **JColloids** [DGPOR18]. **JDiffraction** [PQTGS17]. **Jeans** [BHN+16]. **Jet** [LNSD15, BJ14, BBUY13, Gao13a, GLS+13, GGGH14, LHH+12a, LWJV18, OK12, Wei12]. **JETSPIN** [LPC+15]. **JF** [GJHF14]. **Job** [LHL11]. **Johnson** [GSZ13]. **Joint** [GWF+16, ATA+19, AMJ18, BR13]. **Jones** [FPY+17, WN19]. **Jonesium** [MHR+13]. **Jong** [BL18a]. **Jonker** [BGHN19]. **JOSEPHINE** [CPR12]. **JOZSO** [BNV18]. **Julia** [GMO19, KPOR18]. **Jülich** [LAA+10]. **junctions** [CAGL13, KKS18]. **JuNoLo** [LAA+10].

K- [Cip11]. **K-doped** [NS11b]. **Kadomtsev** [LS12a]. **Kalman** [BALV16, LFG14]. **Kalman-filter-based** [LFG14]. **Kansa** [PR13]. **KANTBP** [GCVA14a]. **kappa** [AM14a, COK19]. **KAS** [RPB+15]. **KaTie** [vH18]. **KdV** [MWCY14]. **KdV-type** [MWCY14]. **Kepler** [BBS14, MR14]. **Kernel** [ALS16, HWL+17, CB15b, GBN17, GBSY18, rJmYT11, LLX14b,

Maz13, Qia10, WC13, XLL15, YE14a]. **kernels** [BK12, CLB11, WC15, WWR+16]. **Kerov** [JWJL12]. **Kerr** [WN10]. **KEWPIE2** [LMAB16]. **key** [CTL15]. **key-node** [CTL15]. **Kh** [Maź19]. **kilo** [NBN+14]. **kilo-processor** [NBN+14]. **kind** [Boy15, Kir10]. **kinematical** [WS11a]. **kinematics** [BCH13]. **Kinetic** [COK19, JA17, MBRV+13, ÁSTT16, ÁSS18, ACCB13, BDBV12, BB13b, BENK+17, CEP18, CFFR15, DSHS17, EPB+16, Evs14, GAGW16, GBSY18, HAK+14, HMR14, KQYH17, LS14, LS15a, LS15b, Les16, LDF+16, NNWS15, NDSH18, NM14, PZZL19, QM10, SISW10, SS14, SK12, SKK17, Sza13a, VEM12, WG16b, ZWC+19, GBSY18, WLZN17, ZCC19]. **Kinetic-j** [GBSY18]. **kinetics** [BTC+17, LCC13, NCS17, RDP14, SAN18, TPC16, ZBMM11]. **KIPP** [ZCC19]. **Kira** [MUU18]. **Kirillov** [JWJL12]. **kit** [WZHE18]. **Klauder** [Kri12]. **Klein** [DG10a, DN13, Eba13, KZC+10, LD10a, PTS12, RM10a, SW14c]. **KMC** [LS14]. **KMCLib** [LS14, LS15a]. **kmos** [HMR14]. **Knot** [SD10b]. **knowledge** [CMdB11, ZLLP17, Cho11]. **Knowledge-based** [Cho11]. **Knudsen** [DS13a]. **Kohn** [KKL+18, SCS12, SCB17b, SPSP18, zYCG+18]. **Kondo** [IUM13, YWOD19]. **Kontorova** [AMM11]. **Kontorova-Tomlinson** [AMM11]. **Kopelman** [FKH15]. **Korean** [CLKK11, KCL11]. **Kosterlitz** [RMC16]. **Krasilnikov** [Maź19]. **Kriging** [RPB+15]. **Krylov** [HCSW10, BB15, BBF+10, BH11, BVSG19, CB15d, CSV+18, LHJZ10, STK10, SPP19, YJK11, vWB10]. **Kubo** [CKT17]. **Kutta** [FG13, KMS14, KAS12, WW10, YZWR14, BM13, CFMR10, DBMR18, DIP11, DM17, Ixa12, KZC+10, MIW+12, MKS10, NS15, WXL13].

L [ADH+17, Cip11]. **L-** [Cip11]. **lab** [RBG+19, NSXZ14, RBG+19]. **labeling** [Kom15a]. **laboratory** [DMH16]. **LabVIEW** [CO11, Fer15]. **ladder** [ABB+16]. **laden** [SYD17]. **lag** [MKS10, NS15]. **Lagrange** [Jiw15b]. **Lagrangian** [CGG+14, Ein16a, FRFH10, GAB+16, JFHA19, KV10b, Lan13, MIW+12, MFH+13, iNSK+15, Sem16, UNK12]. **Lagrangians** [Deg15]. **Laguerre** [GST17, Ter17]. **Lamb** [STY15, STY18]. **Lamb-shift** [STY15, STY18]. **Lambda** [Eks11]. **Lambert** [Veb12]. **laminar** [EZL+16]. **LAMMPS** [CL13, FMRP16, FPY+17, LK15, MMSF+15, MOD13, NKS15, RU12, Sva12]. **Lanczos** [AKS17, BHT19, MGRB11, MC10, RLM13, SMUT19, TVGB15, JK13]. **Landau** [Wan10a, BR13, Boe18, CSBO13, CXL19, CND11, PEMS19, SW14b, SMJ17, SV13, SA15b, Sin12b, WZ13, WSTP15, YK10, YL12]. **Landau-fluid** [CXL19]. **Landau-Transition-Matrix** [BR13]. **Landweber** [KL11]. **Lane** [CB13b, KMM13, PDRG10]. **LANFOS** [PCEH15]. **LANFOS-H** [PCEH15]. **Langevin** [ATW+19, Tan19, THDH14]. **Langmuir** [AAJA14]. **Language** [ÜS18, SGM18, KST+14b]. **LanHEP** [Sem16]. **Laplacian** [NHS14]. **LAPW** [FWZ+12]. **Large** [BMC+11a, DdJC+19, DSW+15a, HKK11, JEFP14,

JXTS16, KHZ+18, PLD+13, SXW+18, SOM+13, SLZ16, TIMM13, BC10, Bis15, BH11, BC19, CB15a, CB17, CB18, Cas12, CF17, CO11, Deu16, DO14b, DML+16, ECD+10, GS15, GHvdL11, GZL14, GMC18, GJLB12, GHdF10, GBS+16a, GAO13b, HLS12, HC16, HLW16, JWCW17, JLW13, JOK13, LKM+16, LRW+15, LCQF18, LSYZ12, LR13, LR16, LOV10, MBS+10, MAM14, MSR+17, MRL19, MCNRC16, NLB+19, PB16, Raw15, RLM13, SI11, SZC+13, Sha13a, SMUT19, SPSP18, SPP19, Tau10, THDS16, TIM+16, VBG+10, Var16, WDL11, WLZN17, BSW12]. **Large-eddy** [TIMM13, MRL19]. **Large-scale** [BMC+11a, DdJC+19, HKK11, JEFP14, KHZ+18, PLD+13, SXW+18, SLZ16, BC19, CB15a, CB17, CB18, Deu16, DO14b, DML+16, GS15, GHvdL11, GHdF10, GBS+16a, GAO13b, HLS12, JOK13, LCQF18, LR13, LR16, MBS+10, MCNRC16, NLB+19, RLM13, SMUT19, SPSP18, Tau10, THDS16, WDL11, WLZN17]. **Larmor** [XGH+19]. **laser** [BT17a, BEKP19, EZBA16, FZY17, GC12, GH15, HJL+14, IB11, IKS19, JTT11, LJSW11, LV19, LHJ+15, MiH12, MFS+10a, ÓN14, REtVH12, SZM+14, SBE+16, SJY18, SJY20, TC11b, TL19, TT11, ZYZ15, ZZ15, ZLM12]. **laser-atom** [FZY17, TT11]. **laser-driven** [HJL+14]. **laser-induced** [SJY18, SJY20, ZLM12]. **laser-plasma** [REtVH12, TL19]. **lasers** [FYK18]. **latency** [GCC+18]. **later** [DJW+19]. **laterally** [EBCBG17]. **Lattice** [BCJ+11, CYN19, CDS+13b, CKCS13, LS13, SCRS17, TD17, dHGCS11, vdS10, AGH+16, BWWM19, BBC+11, BBB+17a, BHNS17, BB13a, BW12a, BDP16, BO12, CB13a, CAN11, CS16, CZ19, CBB+10, CRA10, CND11, DCU+19, DE13, EPS15, FD13, Fri14a, FKH15, GM18, HLS+17, HFOPF15, HMR14, HCH16, HLTW19, HbotRC15, IUM13, JLA+14, JK14, JEFP14, KP12a, KYM+17, KÓG17, KK14b, KAvdL11, KLO+19, KdMvO14, Law19, LKL11, Lee18, LS14, LQZ+13, LCL+11, MHHL11, MDW16, MOD13, MR14, MRZ10, Maz13, MGS13, NIK+12a, Ots11, RV10, Sai10, STK10, STA18, SD15, Sch14a, SV13, SLZ16, Sin12b, SH16, TKS10, TS19, UA17, WLG+13, Wan16, WLU11, XLCW14, ZKG+18, BLPP13, BCS10, GTSL+13, MWL+10, SSF+17, vdS13, vdSM16]. **lattice-Boltzmann** [CRA10, FKH15, MOD13, Maz13, TS19, SSF+17]. **lattice-Boltzmann/finite** [CRA10]. **lattice-switch** [UA17]. **lattices** [BG11, CCW10, FLP10, HML11, LCCC11, MKV11, SÓÓN11]. **launched** [sLqSqL+13]. **Laura** [BGH+18]. **Laurent** [Per14]. **Lauricella** [BK16b]. **law** [JAS17, SB11, UW12, WCT11]. **laws** [AAD14, DJ11, MWCY14, SW12b]. **Lax** [MWCY14]. **Layer** [LV15, GGI+13, GLW14, JHL+15, Ras09, Ras17, SVV19, WTH15]. **layered** [Bot12, CZF18, CL15b, DV11, LF12, MPSV15, PP13, SVGS18, VCD16]. **LayerOptics** [VCD16]. **layers** [CBB14]. **LB3D** [SSF+17]. **LDA** [PGD17, SW13a]. **LDA-1** [PGD17]. **LDA-1/2** [PGD17]. **leading** [GLPQ11]. **leagues** [dSVLP13]. **leap** [HP14]. **leap-frog** [HP14]. **leaping** [AZM14]. **learning** [BG19a, BSW12, CSP+19, HJE+19, KP16, Law19, WZHE18, YZZ+17]. **Least** [Ber16a, Ber16b, LSCZ11, Liu13, AG12a, DSPJ10, Gor19, Kra11,

LWW10, Wan10b]. **least-square** [DSPJ10]. **least-squares** [AG12a, Kra11]. **left** [REBS16]. **left-right** [REBS16]. **legacy** [BCG+15]. **Legendre** [MSR10, MS15, SSG+10, SSG+18, SPS10]. **Lemon** [DRUE12]. **length** [KMS19, SBB+17, UIY11]. **Lennard** [FPY+17, MHR+13, WN19]. **Lennard-Jones** [FPY+17, WN19]. **Lennard-Jonesium** [MHR+13]. **LEOrbit** [MPS13]. **LEP** [BBH+10, BBH+11a]. **lepton** [CGV13, CPWZ18, DSS+19, Mur14]. **leptons** [KFS+13]. **less** [Ber16a, Ber16b, Pos18]. **Level** [Ano19m, Ki10, NHSY15, ACD+14b, BR14, BKS15, Fen12b, FE11, FEH11, FHA17, FN17, HEF12, HZW+19, KN13, LW14a, LCQF18, LY16, MNPY14, OK10, SHZ13, WL11b, XHLM12, XLX+15, YS17, ZHC16, vH18, IBP+15, MFG+13]. **level-of-detail** [OK10]. **Level-Set** [NHSY15, FHA17]. **level/high** [MVS15]. **levels** [AKV18, GCVA14a, Kra11, TRM+12, ZW15]. **LEVIS** [PCGM14]. **Levy** [YZZ+17]. **LHC** [Ano19m, BDDM18, CUL+17, DDK+15, KSTR15, QGLP13]. **libCreme** [RLL12]. **LIBERI** [TO10b]. **libraries** [BV13, GAC+17, dALM+12]. **Library** [TO10b, Asl14, BS11, BS13a, BS14a, BDJS18, BCPS11, BCR14, BBB+19, BMS+16, BFD+11, COK19, CECGS16, ÇÖSÜ11, Cri18, CGH+11, CKJR11, DBD+17, DDH17, DRUE12, DLW+18, Ein16b, GGI+13, GP13, GVPJ18, Gri11, GHvSF14, GBS16b, HAV+14, HM12a, HvAS+13, Ike18, ID18, JCL10, KvdO11, KPV16, LS16, MW12, MOB12, MD11b, MCAdF14, MV11, MRL19, MG10b, Mül11b, Mül14b, MGR16, NGCI+12, PQTGS17, Pos19, RDC+18, RLL12, Sai13, Sch18, SWS+12, SPAW17, SJHS19, TM14, TK19, WEH+19, ZE11, ZE16]. **LibreGrowth** [LRSS19]. **Libxc** [MOB12]. **lidar** [SSP16]. **Lie** [ACDdM19, FK15, HR11, JC14, Naz12]. **LieART** [FK15]. **life** [GMH11]. **lifted** [XWF18]. **ligands** [PDC14]. **Light** [NSH+19, SKML11, BF16, CKLM10, EW14b, EW16, HHT14, KOT12, LN16, TMD11, WL11b, ZSW+17a, Zió14]. **Light-Matter** [NSH+19]. **light-wave** [BF16]. **lightest** [DML+16]. **lights** [SJW10]. **like** [BP12, Fri17, HSD17, HH11a, LBM+14, LB11, LB12, MFS10b, NVW+13, PLCC12, SQA+15, WJCZ18, XLL15, ZRS12]. **LikeDM** [HTY17]. **Likelihood** [HTY17]. **LIMAO** [SJY20, SJY18]. **LIME** [DRUE12]. **limit** [CM14a, CEF16, DDK+17, HLM17, MMO+17]. **limitations** [CSV+18]. **Limited** [BR11, CH11b, KdMvO14]. **limiter** [AAD14, KGG+16]. **Limits** [BCTP18, LCRL10, BBB+18]. **line** [MKMK10, Ruf13, SCM+16, Zlo13]. **Linear** [AG12a, BMU11, MW12, OOK+12, YÇÖ15, AS11b, ABF19, BMC+11a, BMC+11b, BCT17, BGHN19, CFSK14, FUSH14, FVH18, FR15, GBP13, Gor19, GCHL15, HDF+19, HRC11, HHS+10, Jan10, JYPA18, JWCW17, Kan14, Kap12a, Kap12b, KBB+17, KBSP19, MJB+10, MBGV15, PHT+19, PR14, RWKS15, SK12, SLEF17, SS10b, SPP19, SJY18, SJY20, TC11a, VBS+17, VDA+19, XYZX19, YZ19]. **linear-** [SJY18, SJY20]. **linear-scaling** [FUSH14, FVH18, KBB+17, RWKS15]. **linearization** [CLF18, MBFB13]. **Linearized** [KOK17, AM14b, CSPAD10, DKSG16, GBSY18, IH11, KAW+10, lLsSZ14, PBMAD12]. **linearly** [ÁSTT16]. **lines**

[AKV18, McM17, SVGS18]. **link** [SK10]. **linked** [LYJY10, TKR13, WG11, MRZ10]. **linked-cell** [LYJY10]. **linked-cluster** [TKR13]. **LINPRO** [MW12]. **Linux** [GBC+18]. **Liouville** [LV10, MGRB11, TVGB15]. **Liouvillian** [ADdM12a, ACDdM14]. **lipid** [FPY+17]. **liquid** [FBP+14, JHH+19, LHG+19, MSH11, Sin12b, SA14, TW11, WJCZ18]. **liquid-like** [WJCZ18]. **LiquidLib** [WJCZ18]. **liquids** [WJCZ18]. **List** [Ano10a, Ano11b, Ano12a, Ano13a, Ano15a, Ano16a, MRZ10, HAN+16, KHN19, LYJY10, ZZHG18]. **Lists** [KKK+17, ABRS12, WRR18]. **LiteRed** [SS13c]. **Liviu** [Pat12]. **LNL** [MRZ10]. **load** [BS15b, EZBA16, EDPZ19, ER19, FRG12, FN17, GMF+17, JFHA19, OCF10, SKSK13]. **load-balanced** [EZBA16, OCF10]. **load-balancing** [BS15b, FN17]. **loaded** [Pra11]. **Local** [CWJ19, CHDF10, LWZ14, PR12, WHG+19, AMJ18, ABH+19, DG10b, DKG+14, GWL+17, GTK+19a, KTB17, KL14, LYX+17, LJWK11, LKT+16, MS14, NKS15, QWZW18, TKJ19, VPP+12, Wit14, XWF18, YXT+15]. **localised** [MYP+14, SPMM11]. **Localization** [dSFdFF13, HW11, OCM+19]. **localization-delocalization** [HW11]. **localized** [BAF18, KAW+10, NGM+10, PVK+14a, PVK+14b, PMVG16, RCGT16]. **locally** [CZD15, LLP15, RC18, ELL+17a]. **location** [CS17, PP13]. **Loewner** [SW11]. **logarithmic** [PPY14]. **LONE** [CB16a]. **Long** [DV11, Boe14, BAF18, BENK+17, CHZ18, DS11b, ERPDFLS15, Fil13, Fil14, HL19a, HM17, Sza16, iT11, WWVB11]. **long-range** [Boe14, Fil14, HM17, iT11]. **Long-time** [DV11, BENK+17, CHZ18]. **long-wave** [DS11b]. **longitudinal** [KB15a, Qia17]. **look** [JLA+14]. **lookup** [CXG+19]. **Loop** [ADH+17, DLU18, ABB+16, ABB+14, AMRdA17, Ano10o, BBU11, BGM+14, BWWM19, BBH+18, BDGG19, BH13, BCH13, BHJ+15, CEZ16, CGH+11, DDH17, DNPS13, Fen12b, FEH11, GLZ17, HEF12, KKSY18, LS17b, MCWJ15, Mey18, Pat15, Pat17, Per14, Pik18, Sta11, TMS19, YdDH+12, dDYK+18, vH11]. **loop-corrected** [BGM+14]. **Loopedia** [BBH+18]. **Loophole** [DMH16]. **Loophole-free** [DMH16]. **loops** [AHK+12, ACD+14a, BCS10, Pre18]. **LOPT** [Kra11]. **Lorentz** [CdFDS16, LV19, LL19, MFS+10a, Ume18, Ume19]. **Lorentz-boosted** [LV19]. **Lorenz** [BDT15]. **loss** [Hoh14b, Lit13, TVGB15]. **losses** [Eme11]. **lossless** [HLW16, TMD11]. **lossy** [WWHW14]. **Low** [BK12, KGNS10, LCY+11, AGH+16, BDBV12, BT17b, Fu19a, GCC+18, HYM11, Kol15, LO14, MSPD12, MCP+11, NRSVW12, PTMDPK14, RF16, RHC15, TSIM16, TKJ19, TIM+16, VSG18, Wei12, Zlo14, vRWS14, BH14b, MPS13, MNPF17]. **low-amplitude** [BT17b]. **low-density** [HYM11]. **low-dimensional** [vRWS14]. **low-dissipation** [Fu19a]. **low-dissipative** [TKJ19]. **Low-energy** [LCY+11, MSPD12, NRSVW12, BH14b]. **low-frequency** [MCP+11, TSIM16]. **low-latency** [GCC+18]. **low-mass** [PTMDPK14]. **low-noise** [BDBV12]. **low-order** [AGH+16]. **Low-rank** [BK12]. **Low-temperature** [KGNS10]. **lower** [RTT+18]. **lower-hybrid-wave-driven** [RTT+18]. **lowest** [Kol14]. **LS** [NCB18].

LS-STAG [NCB18]. **LSQR** [Wan10b]. **LU** [San15, WM13, ZSW+17b]. **Lugovskoy** [Maź19]. **luminescence** [PVH+17, Str15]. **Lyapunov** [MH18].

M [CF16, Maź19, Pre18, Cip11]. **M-file** [CF16]. **M-file/Mif** [CF16]. **M-shell** [Cip11]. **M.** [MLK+19]. **M2L** [TSIM16]. **M3** [Cip13]. **M3D** [BF10]. **Ma** [San15]. **machine** [BG19a, BSW12, CFW17, CSP+19, JCW+13, KP16, Law19]. **machines** [NOR15, SSS+11]. **Maclaurin** [SBvD13]. **macromolecular** [CRNK12, Gio14a]. **macroscopic** [BS12]. **MadAnalysis** [CFS13]. **made** [YZY10]. **MadGraph** [ADF+15]. **Madland** [Rom15]. **MAGE** [CF16]. **Magic** [MNL19]. **Magnetic** [MHHL11, VCMS+13, BDK11, BUJ15, BMW14, CLHL19, CHW+15, CFW17, CZL+11, CHZ18, DXY+19, DOP17, DA16, Dua12, HSD17, HEF+11, KB15a, KOT12, Ki10, LLQX19, LFG14, LZ17, LR13, LR16, MDW16, MJB+10, MEG12, PBE14, PCGM14, RS12, SEW12, SW14a, SEW14, SW14b, SBPD19, SZM+14, SHNM11, Tau10, TG11, VPM12, YTYA17, YJK11]. **magnetically** [Ram12, SCM+16]. **magnetisation** [ALC18]. **magnetised** [AM19]. **magnetization** [CZGC19]. **magnetized** [BOPL17, BEKP19, CFF19, LJD+19, LDF+16, MF17, MCM+12, MMA15, Ram10, sX14, Yan09]. **Magneto** [LKW11, CCL15, KAH18, OCL+13]. **Magneto-hydrodynamic** [LKW11]. **magneto-optical** [CCL15, OCL+13]. **magneto-optics** [KAH18]. **magnetocrystalline** [QZ19]. **magnetogasdynamic** [Yua19]. **magnetohydrodynamic** [MKL17, SNB11, TYH+15, WWFT11, WAW14, WWM14, YTYA17, ZD15]. **magnetohydrodynamics** [CGM17, Ein16b, QM10, QA13a, WFZG19, dlRM18]. **magnetohydrodynamics-based** [WFZG19]. **magnetoresistance** [Dua12]. **magnetospheric** [LYP14]. **magnetostatic** [CCHL11]. **magnetostatic/electrostatic** [CCHL11]. **Magnetotransport** [TTG11, GTG+11]. **magnets** [Rei11, Rei12, TMS19]. **Magnus** [AEKO18, BCT17, IKS19]. **MAGPACK** [RRCSCJ10]. **major** [HFSK12]. **Making** [Hoh18, LPBH11]. **MaMiCo** [NFA+16, NB17]. **MaMR** [JTW+17]. **manage** [GHdF10]. **management** [AABC+13, AZM14, Kro16, SBL16, TdAdSS11]. **Manager** [LHL11]. **ManeParse** [CGO17]. **manifest** [REBS16]. **manifolds** [CB18, DS13c]. **manipulating** [Hir15]. **manipulation** [BD10]. **Manna** [CCWL11]. **Manual** [DIR+19, AKK+18, BBG+13]. **Many** [BRH+16, GBJ+13, GBJ+15, GBJ+19, RB18, ADT+19, BBC+13b, FCVH17, FLW17, GBJ+10, GBJ+12, GBFJ14, HLZ+13, JWC18, JWM+18, JOK13, JDG12, KPST15, KHN19, Men11, MMY+19, Mül14c, PMMW15, PBS+17, RJKC16, WZHE18, ZC12, ZBN+19, NBW16]. **Many-Body** [GBJ+13, GBJ+15, GBJ+19, BRH+16, ADT+19, BBC+13b, FCVH17, GBJ+10, GBJ+12, GBFJ14, HLZ+13, JWC18, JWM+18, JOK13, JDG12, KPST15, KHN19, PMMW15, WZHE18, ZC12]. **many-core** [RJKC16].

Many-integrated [RB18]. **many-particle** [FLW17, Men11, Mül14c, PBS+17]. **many-variable** [MMY+19]. **manycore** [HdM16, HWCdM19]. **map** [RMC16, SCM+16, TRM+12]. **MAPLE** [GLHR19, ADdM12a, ADdM14, CDdM14, FF11, MWCY14, SD10a, VJC12]. **mapped** [LL15]. **Mapping** [GBK+12, ADdM16b, BAR12b, CDdM14]. **mappings** [Str15]. **MapReduce** [JTW+17, TOB+14]. **maps** [AKK+18, ES11]. **Marangoni** [GLW14]. **marching** [ZY19a, MGO13]. **marker** [DF14]. **market** [CLKK11, KCL11]. **Markov** [EBDM17, KSW15, LN16]. **Markovian** [CF17, JPSS10, JMG+17, ZF15, dSVLP13]. **marriage** [WCT11]. **Marrink** [BL18a]. **Martini** [BL18a, dJBIM16]. **mass** [AHK+12, ABF19, BBC+11, BG19a, BO12, CWY+17, CGV13, CKCS13, CZ19, DBP19, HKZN17, HP17, HHC16, LS13, NGCI+12, PTMDPK14, Sal16, SVG10, SAE+16, ZY19b, Ros16]. **mass-preserving** [Sal16]. **mass-transfer** [NGCI+12]. **masses** [AKH12, AMRdA17, BGM+14, BBC+11, CGH+11, SS12, YdDH+12]. **Massive** [BH13, Tan19, WAHL13, ABB+16, BBF+13, BDGG19, OLG+16, Pik18]. **massive-particle** [BDGG19]. **Massively** [BPB+17, BHS18, BVSG19, DBDP12, DN18, DJW+19, GJB11, GZWJ18, KHBS19, KBB+17, Sus17b, SSM+17, YL12, CSK+19, DSS+12, ER19, GRLS18, HPN18, HBH+17, KVV19, KÓG17, KHZ+18, LS12b, NPAG11, Ngu17, ORS+14, WSH+12, WC15]. **massively-parallel** [NPAG11]. **massless** [BBUY13, CKCS13, GBJ+15]. **MassToMI** [Ros16]. **master** [GM17, GTG+11, Mey18, Pra17]. **Matched** [LV15, SVV19]. **matching** [BJ14, KPV16, OK12, OK18, SGM11a, SGM11b]. **MatchingTools** [Cri18]. **Material** [CLH+17, KC18, ASPDL+16, BSWC14, Buc19, FM15, JTW+17, Pra11, San11, SNG+11, SC16b]. **Materials** [MCY+16, APS+16, CVK+17, CTL15, DSS+12, ELL+17a, GTPWL12, JVR12, KAR+15, LOK+16, LSG+12, MHV17, NVAFO18, PLD15, Ram12, Ram14, SM19, Sol11, TKP12, VCD16, WWHW14, WCL14, WGVPL17, WZS+18, ZLLP17, ZZD15, ZZ17b]. **maternal** [ZBMM11]. **MathemaTB** [Jac19]. **MATHEMATICA** [BKM14, AC13, AC15, AC18, Aza13, BK13b, BKK13, BK15, BK16b, CGO17, CMS17, Dep17, Eks11, FRW17, FMRP16, FK15, Fen12a, Fen16, GLMG12, HHP+14, Jac19, LR18a, LR18b, MZ14, Mis12, Mis13, Naz12, Nov17, Nut14, Pat15, Pat17, Pre18, Ros16, SBQ14, Sta19, TJD11, Tab16, TM14, Tos10, WL11a, Wie15, XMLC16, Zit11]. **Mathematica-based** [BKK13, BK15, BK16b]. **Mathematical** [TN11, CD15]. **Mathematica(R)** [SÜ18]. **Mathematics** [CB18, TN11]. **MathLink** [Hah12]. **MathQCDSR** [WL11a]. **Matlab** [RC16, CR13, CZ17, Dat13, RDP14, SZM+14, UW12, ZSW+17a, AD14, AD15, Asi10, Bal19, Cap13, CATK11, CF16, HT12, Hoh14a, NSXZ14, OAKS11, RC13, SL17, SH18, TACA15, VPM16, VK16]. **Matlab-based** [RC16, SZM+14, UW12, Cap13, OAKS11, RC13]. **matrices** [BH11, CDMCN11, GSMK17, GBRB11, GCVA14a, Hoh18, HM18, JK13,

LW13, DPHB17, NCHN15, NLSJ17, PB16, TC12, dlHV12]. **Matrix** [BK11b, DBK+14, JWC18, ZLL18, ABB+16, ACMM19, ART17, APV10, AC13, BG19b, Bot12, CNMC10a, CLJ12, CPWZ18, CK12, DN18, Des16, GZL14, GJ18a, HCRD14, HD17, IH11, JZJ18, KK16b, KH12, Lee18, Lev19, LJB+16, MiH12, MGK13, Mil16, MSRL10, NBN+14, NPM16, PO14, QJF16, Ram12, RGH10, Sai13, Sar17a, Sar17b, SDS15, Sha13b, Sha16, SD10a, SAS11, SDL+16, TK14b, UFKB19, USOA13, VvAV+11b, VvAV+11a, WPAV14, WWR+16, BD12, BR13]. **matrix-element** [Sha16]. **matrix-exponential** [Ram12]. **matrix-free** [KH12]. **Matter** [NSH+19, AMR19, BBB+11, BBPS14, BBPS15, BHN+16, CCM12, FTI18, GT19, HBL+13, HTY17, HCM19, IKS19, Jab17, LRC+11, MKB+11, ONS+15, SBH+14, WJCZ18]. **maximal** [Maz13]. **maximally** [KAW+10, MYP+14, NGM+10, PVK+14a, PVK+14b, PMVG16, SV13, SPMM11]. **maximally-localised** [MYP+14, SPMM11]. **maximally-localized** [PVK+14a, PVK+14b]. **maximum** [LLG17]. **Maxis** [LJZ+18]. **Maxwell** [BSK+18, BB13b, CSJ+17, CKK+13, CEF16, Dem13, FE11, HLLH16, KVV19, KO14a, LV15, LLP15, LYX+17, SCLW16, VV16, VV18, YXT+15]. **Maździarz** [MLK+19]. **MBE** [AH13]. **MBPT** [KPST15]. **MC** [FK12, JOR+12, SM19, DGPW11, LRC+11, WS11b]. **MC-TESTER** [DGPW11]. **MCC** [SBL16]. **McCormack** [Sza13a]. **MCdevelop** [SJ11]. **MCgrid** [BHS15, DHS14]. **MCMC** [BG13b, BLG14, Bon15, Bon16, VPMVH+17]. **MCNP** [Car10a, Car10b]. **MCNP5** [SMCB+15]. **MCNPX** [LL15]. **MCPL** [KKK+17]. **MCS** [LLE+18, YLL+19]. **mcsanc** [BS13b]. **mcsanc-v1.01** [BS13b]. **MD** [FMRP16, HBH+17, TCCV18]. **mdFoam** [LBR+18]. **MDMC** [BG14a]. **MEAM** [DFM+15, Duf16]. **MEAMfit** [DFM+15, Duf16]. **Mean** [LS15b, BG11, DPB16, DBP19, EPB+16, GTK+19a, NPVR14, QJF16, UW12, WHG+19, dB14]. **mean-field** [BG11, DPB16, DBP19, GTK+19a, NPVR14, QJF16, dB14]. **mean-square** [UW12]. **means** [ACMM10, DAW+19, dASJC+19]. **measure** [ABCM14, LLX14a]. **measured** [Kon11, Sco13]. **measurement** [AK13b, BJM15, CDSG11, LLQX19, PR13, RBG+19]. **measurements** [EBDM17, ERPDFLS15, FBHB17, RF10, RBG+19, SW12b, WLM14]. **measures** [HLL13, RLL12]. **measuring** [ICPD16]. **Mechanical** [Voy13, AMM11, AYDY11, DGMZ15, LV13, RC11, SZ15, Sin11, Sin12a]. **Mechanics** [LSJ13, JZJ18, KV10a, OML11, ORCR17, PGO17, RK11, RU12, STT11, SÜ18, ZF15]. **Mechanism** [GAGW16, BUJ15, BNAB11, CHDF10, CGV13, ÇÖSÜ11, JHJG14, YZZ+17]. **mechanisms** [CFFR15, GAGW16]. **Mechanistic** [ORS+14]. **media** [BJ11, CNS+18, EZBA16, FKS+19, HZW+19, HSF+15, JA17, MPM14, MAIVAH14, OP12, RNdB19, SVGS18, SGNL17, Ser10, TMD11, Zió14, vMB14]. **mediated** [HLS12]. **medium** [IB11, PP13, SM14]. **Meep** [ORI+10]. **MEKS** [GLS+13]. **melting** [YK18]. **melts** [Krö19]. **membrane** [CZN14, FPY+17]. **membranes** [PDC14]. **memetic** [VHP+15]. **Memory** [MR14, BKS15,

CL15b, CSV+18, DGMZ15, DKG+14, IW15, LP15, LL15, LRSS19, MD11a, NS11b, NFS15, OLG+16, TE18, WMRR17, WRMR19, ZWC+19]. **memory-mapped** [LL15]. **MEMPSODE** [VPP+12, VHP+15]. **Mercedes** [HDM+12, SBPN15]. **merge** [PMMF15]. **merging** [LTP16, VGM+15, XLX13]. **MESA** [GWM13]. **MESAFace** [GWM13]. **Mesh** [HS14a, ACMM19, AWK+16, BCH11, BKPT12, EGT+18, FXZ+14, GX15, HCC14, ILZ+19, JG16, JFC12, JCL+18, KC14, KYKN15a, KYKN15b, LJWK11, LH18, LWRQ16, McM17, PZZL19, RHBH15a, RHBH15b, UBRT10, VLM11, ZD15, CZF18]. **mesh-free** [JCL+18, McM17]. **meshes** [ASGLK10, AK15, FXZ+14, LA13, OCM+19, SP18b, YWX11]. **meshing** [ZPH+15]. **meshless** [DG10b, MM12, QLN14, SW14c, SD10b, XLL15]. **meson** [BBC+11, CWW15, YWW13]. **mesoscale** [HPN18, WSH+14]. **Mesoscopic** [SS11c, BLV+19, WJHW14]. **message** [TSTT13]. **message-passing** [TSTT13]. **messages** [BABC19]. **meta** [GSZ13]. **meta-GGA** [GSZ13]. **Metadata** [RSSH+10]. **Metadyn** [HS16]. **metadynamics** [BPML12, HS16]. **METAGUI** [BPML12, GLR17]. **metaheuristic** [CNMC10b]. **metaheuristics** [dASJC+19]. **metal** [FSJ+16, HBH+17]. **metallic** [HKF+12, HLW16, LLHC11, ZHCR18, ZLLP17]. **metals** [BT17a, KOK17, PSP16]. **metamagnetic** [dSFdFF13]. **metamaterial** [LL19]. **metamaterials** [RHW+12]. **Metamodelling** [ZKS13]. **metaphor** [DMH16]. **metastability** [FDWC12, JHJG14]. **metastable** [BVC13, ES16, HL19a]. **METATOY** [LHC+12]. **METHES** [RF16]. **Method** [BUJ15, EW16, GHBL18, Les16, RNdB19, TGH+16, ZLL18, AM14a, AM14b, ARYT17, AS11b, ADdM16b, ASS13, ABDR17, AG12a, ACDdM19, AAJA14, BOPL17, BBL+13, BM13, BF16, BBB+17a, BK11a, BH14b, BH16, BW12b, BR14, BHT19, BT17b, BL18b, Bis15, BH11, BMW14, BCM+16, BMNS14, BPMS16, BIT12, BHND16, BENK+17, CZ18a, CL15a, CB13b, CKSM+19, CAN11, CSPAD10, CZS10, CL10, CLJ12, CW13, CTL15, CW16, CS17, CSL+13, CKK+13, CB15d, CvW12a, CvW12b, Cor14, Cou13a, Cou13b, CNS+14, DZ15, DEMM19, DT10, DG10b, DT11a, DM17, Den10, DKSG16, DCU+19, DA16, DMC10, DCGG13, DBLF16, DFM+15, Duf16, DO14a, DO14b, EBCB+14, ELDS14, EKK14, EFK+19, FGGM11, FS17, Fen12b, FK12, FNPMB10, FBN+13, FPY+17, Fu19a, FJ19, FKS+19, FN17, GC12, GZL14, GML15, GBP13, GA15, GA10, GZZ19, GGG+19]. **method** [GCH+18, GYW+10, GB17, GMHZ19, HE13, HV15, Ham11, HC16, HLLH16, HKPF19, HSD17, HKvH16, HDZ14, HJGL18, HJGL19, HHC+10, HWW12, HLW16, HM18, IH11, Ixa10, Ixa12, Jal10, Jan10, JK14, JK19, JFHA19, JWCW17, JLM18, rJmYT11, JOR+12, JGAL+13, JLW13, JCL+18, JPM12, JK13, JU17, KMS14, KK13, KU10, Kap12a, Kap12b, KCN18, KKG+15, KGFS18, Ki10, KL17, KO14a, KL11, KN13, Koh15, KDM11, KA17, KV19, KAS12, KPST15, Kra10, KZ14, KH19, KMJS16, KR14, KSW12, KOK17, KSY17, LOL+18, LLHC11, LM19, LLQX19, LX12, LM16, LLG17, LHJZ10, LSCZ11, LCCC11, LHC+13, LST15, LLMW17, LCQF18, LJWK11, LHH+12b,

Lin13, LSK+13, LTP+17, Liu11, Liu13, LLZ+17, LOK+18, LJD+19, LLX14a, MCWJ15, MD11a, MDHD18, MiH12, MIW+12, MRL18, MST+18, MSPD12, MRZ10, MC12, MH18, MBFB13, MK10, MNPF17, MMY+19, MM10].
method
[MM12, MFG+13, MSR+17, MBGV15, MBFD12, NDSH18, NPM16, NHSY15, NZQL14, NCB18, NS15, NAQ16, Nis11, NMS14, OYK+14, OPO+11, OPSR13, OPR14, ORI+10, OT11, PHA18, PSBT12, PAS11, PS14, PDRG10, PR13, PBMAD12, PEMS19, PGD17, Pit12, PS11, PSP16, PB16, QM10, QYM11, QA13a, QWZW18, QDZ+13, Qia10, QwWL+15, QLN14, Ram10, RVA14, RCGT16, Ras09, Ras17, Raw15, Raw16, RVDS16, RLS16, RDVS18, RMS+12, RH17, RTA10, Sal16, San15, SW13a, Sch14a, SEW12, SEW14, SW14b, SSF+17, SNB11, SCS12, SDS15, SD14, Ser10, SW14c, SMUT19, SD10b, SS13b, SA15b, Sie16, SMdONF14, SHL+11, SBvD13, SS10b, SCG11, SDL+16, SKSK13, SL14, SPSP18, SPP19, Sza13b, Sza13a, Sza16, TSIM16, TD14, TZM17, TT14, TFBW14, TC11b, TKP15, TY10, Tia11, TT11, TW15].
method
[TKZ18, TDL+14, UO15b, UO15a, UFKB19, VdLF14, VK14, Wan10a, WX11, WLZM12, WZ13, WM13, WX14, WLGY18, WN10, Wil19, WP10b, XHLUF+18, XWF18, XZ12, XLL15, XLX+15, XD16, XGH+19, Yam16, YLO13, YBNY13, YS17, YTYA17, YQM12, YQM14, ZAHA10, ZFH14, ZHPS10, ZOZ13, ZSW+17b, ZWLZ17, ZKG+18, ZXZ+19, ZX10, ZS13, ZC12, ZST11, dASJC+19, vdSM16, CC10b, CC12, EW14b, EEGW12, SVGS18].
Method- [Les16]. **Methods**
[EVB14, EBCBG17, PVK+17, ARAB+17, ACCB13, ABB13, ABCM14, AH13, ABH+19, ADdM15, BCH11, BWWM19, BB15, BH17, Bla15, BBF+10, BB10, CFMR10, CDBM16, CH19, CYSL12, CS10, Col14, CHZ18, DIP11, DMP18, DN13, DF11a, DLW+18, FLW10, FMW10, FHTO17, FG13, FGR14, Fri14a, GBN17, GSKM14, GSKM15, GTK+19b, HVP+19, JLA+14, Jiw15b, KFS17, KKL+18, LMRC15, LD10a, LV10, LWYW11, LLP15, LW14b, LHGF18, LY16, LAG+17, LL12, MCP+11, MCGR11, MKS10, MM11, DPHB17, PMMW15, PMMF15, RL10, RHH12, SZ15, SVV19, SEGP15, SW12a, SW13b, SO19, SC16b, SBH+12, SS18, SAN18, SPP19, TBZ12, TE18, TVT+16, TXZL15, WC10, WXL13, WWC+16, WLH+12, WYH19, Wu10, WW10, WT15, XJS16, XHLM12, YZ16, YWYF09, YZZ11, YWX11, YJK11, ZW15, ZTG13, ZTG14].
metric [WN10]. **Metropolis** [AIG16, GM14, MP11, PM14, ZDD+13]. **MeV** [Pos18]. **MFIE** [ZDWY10]. **Mg** [HH11a]. **Mg-like** [HH11a]. **MH** [HFSK12]. **MHD** [Ras17, BT17b, FDZ17, FXZ+14, JFC12, LC15, ML17, PHT+19, PE15, Ras09, VKP14, WRBL19, ZOZ13, ZNT15]. **MIC**
[NBW16, RB18, BBS14]. **micro** [Bal19, BD10, HLS+17]. **micro-currents** [HLS+17]. **micro-manipulation** [BD10]. **micro-resonators** [Bal19]. **Microcanonical** [AMR15, FD13]. **microcavity** [VBMS17]. **microengineering** [MFG+13]. **microfluidic** [JHH+19]. **micrographs** [Nov17]. **microgrid** [CLH+17]. **Micromagnetic**
[CF16, FCC15, EFK+19, RJW+19]. **micromagnetics** [TIM+16].

micrOMEGAs4.1 [BBPS15]. **micrOMEGAs5.0** [BBG+18]. **micrOMEGAs_2.4** [BBB+11]. **micrOMEGAs_3** [BBPS14]. **micrOMEGAs_4.3** [BBB+18]. **micromotors** [AD11]. **micron** [BHNS17]. **micron-** [BHNS17]. **microquasar** [Lan13]. **microrheology** [BDGM+17, OOGP19]. **microscope** [TCK+15]. **Microscopic** [VCD16, AMM11, BPB+17, Gen10, RU12, VSO+13]. **Microscopy** [MAC12, BDGM+17, CRB+17, DGPOR18, MHV17, SSM+17, ZSW+17a]. **microturbulence** [PDJ10]. **microwave** [CGSB18, HKF+12, KRB15, WWC+16]. **MICs** [SAN18]. **Mie** [ESM17, LPRPR17]. **Miedema** [ZZH+16]. **Mif** [CF16]. **Migpore** [SM14]. **migration** [SM14]. **Milestone** [SV14]. **million** [RZ19]. **millions** [CUL+17, GJ18a]. **Mills** [CJ12, HAH13, SD15]. **Milne** [RM10b]. **mine** [BBV10]. **Minghui** [San15]. **mini** [SCJH19]. **mini-application** [SCJH19]. **minima** [ATA+19]. **Minimal** [AAT+20, Asi10, AAT+14, ABdA15, AC17, AMRdA17, BDDM18, FMW10, KKSY18, Laz15, MKS10, Ray10, AB10, DET12]. **minimization** [CB13b, Cor14, EFK+19, Sit14a, Sit14b, Sit16, WX14]. **Minimizing** [LM12, CM10a, Wal11, YLK10]. **minimum** [DO14a, TW15]. **minisweep** [SCJH19]. **minor** [Cip13]. **minority** [HAK+14]. **misalignments** [SM11]. **MIST** [BBB+19]. **MITHRA** [FYK18]. **Mitigation** [YXT+15, SKH+10]. **mix** [WG12]. **Mixed** [AG12b, MW19, CBB+10, FKS+19, JOR+12, LX12, LGW13, ONS+15, RC13, RC16, RHC15, RCH16, RCH19, TC12, dTOV18]. **mixed-basis** [ONS+15]. **mixed-hybrid** [FKS+19]. **Mixed-precision** [AG12b, MW19]. **Mixing** [PM13, CBGY17, CBYG18]. **MIXMAX** [Sav15]. **mixture** [SLK19]. **mixtures** [GZW17, SD10a, Sza13a, Sza16]. **mKdV** [MM12]. **MLFMA** [GMC18]. **MLMD** [IBP+15]. **MM** [MMSF+15, PSMS14, PSMS15]. **MM/PBSA** [PSMS14, PSMS15]. **mm_par2.0** [OKM12]. **MMAPDNG** [LL15]. **MMKG** [ZLLP17]. **MMonCa** [MBRV+13]. **MMTK** [BCFR15]. **MNPBEM** [HT12, Hoh14b, Hoh18, WTH15]. **Mobile** [Sal12]. **mobility** [LZL11]. **Möbius** [BNO17]. **MOC** [TGH+16]. **modalities** [Che11]. **MODAR** [Car10a, Car10b]. **Mode** [TZK16, DKT14, Hsu11b, LRK13, SVGS18, SDL+16, TKZ18]. **Model** [BM19, Dan10a, Dan10b, Deg15, KPA13, NHD16, Ore19, TD11, VKLM11, AMM11, ABdA15, AMRdA17, AGVP10, AKK+18, ALC18, ALA+19, AGB+15, BLV+19, BDT15, BHNS17, BT17a, BCP+16, BSC+13, BM16, BPMM14, BVP10, Boe14, BB12, BS12, CCD+16, Cas12, CPCDdM18, CLC14, CM15, CL10, CCWL11, CCXC15, CZZ+19, CKCS13, CB16b, CL13, CEP18, DCC+10, DS10, DDK+17, DT11b, DT18, DDK+15, EGT+18, EPB+16, ERS10c, ERS10a, ERS10b, FLZ+18, FFT+14, FXZ+14, FLP10, FDWC12, Fon12, GTSL+13, GZW17, Gor19, Gri10, GFJ+14, GCHL15, GLW14, GRTZ10, Ham11, HFOPF15, HDF+19, HDM+12, IUM13, JEFP14, JTW+17, KYM+17, Ker17, KKP11, KKCC19, KAvdL11, KM17, KV10a, KO13, KS12, KKO19, KLO+19, KRB19, LOL+18, LGW13, Leó12, LWL11,

LWL12, LFG14, LX14, LBP15, LLX14b, MHHL11, MD11a, MW19, MH11]. **model** [MEG12, MNC15, MSM+11, MFH+13, NCHN15, NFI17, dlRL11, dlRAPL11, Ots11, Pál12, PBE14, RTÅT15, REBS16, SZY+12, SZY+13, SGM11a, SGM11b, STA18, SAA+10, SFP11, SH18, SJ17, SMJ17, SBPN15, SK12, STY15, STY18, SA15a, SLK19, SYD17, SMUT19, SO19, SLR+11, Sin12b, SH12b, SVG10, SS10a, SQA+15, SCB17b, Sta10, Sta14, SW11, SV12, SSBS15, Sza13a, TL19, TU14, TIMM13, TW11, US16, VS19a, VLM11, WR16, WDL11, WSTP15, WWVB11, WCT11, XZF12, XLCW14, XLL15, XYZX19, Yam16, YK10, YFAT17, ZZ15, ZXL16, ZZG+16, ZZD+16, ZXZ+19, ZY19a, ZY19b, ZLM12, ZYL+15, ZCG17, ZKS+18, ZFR18, ZWC+19, dSdO12, dSFdFF13, dSLF13, dSVLP13, dSF18, vMB14, ABC+18, AB10, BCPS11, BCP13, DET12, DG16, HLM13, KPV16, MW19]. **Model-Driven** [Dan10a, Dan10b]. **Modeling** [CLW11, wH15, TJH17, AD11, BOPL17, Bar11b, BMNS14, BMZ+18, CSJ+17, CL11, CFFR15, Dan12, EZL+16, EDPZ19, EKK14, FZY17, Gai17, GGI+13, HV15, Hak16, Hak19, HDF+19, HCHW11, IP14, Jab19, JGC+11, KEH12, KPA13, KM10, KRB15, KMJS16, KGNS10, Lan13, LV19, LZZL10, LHH+12b, LTL+12, MPS13, MN18, NGCI+12, OBPL19, OP12, PBF+16, PE17, Ram10, Ram12, RAV11, RTA10, SGNL17, SLC11, SN16, SHL+11, Sol11, SCG11, Sva12, TKP12, Uty14, VBMS17, VCD16, WGVPL17, XHLM12, YOM+19, ZE11, ZE16]. **modelings** [Hon18]. **modelled** [MRL19]. **Modelling** [AGB+15, CC16, HdM16, IBKK11, Ano10n, AMR+18, CdLOL19, DBD+17, HKF+12, Kra18b, MDPTK15, MRSD15, MSML10, OBH10, ORS+14, Org15, RF15, RLMGM+11, TN11, Van15]. **Models** [Rei11, Rei12, AS11a, AC17, AABC+13, AG12a, AH13, AhPSV15, ABH+18, AC15, AC16, AC18, BW16, BBC+13a, BR13, BHT19, BKM11, CECGS16, CZ18b, Che17, DCM+12, DNPS13, ELDS14, FW11, Fil13, FD13, Fuh15, HLL13, HvWT17, HCH16, HVMR10, HKVR10, ID18, KÓG17, KO14b, KO16, KST+14b, KTA12, LLMW17, MLGVE14, MST+18, Mur14, NEW+18, NHS14, NP19, NAQ16, PdMML19, PS12, QA13b, RK11, RDN+17, SLZ16, SH16, SOPS12, Sus17b, TAFD19, TSTT13, TVZ+15, WG12, Wan16, Wei11b, XLX+15, YZ19, dlRAPL11, Mel19]. **Modern** [HdM16, BS14a, CDSG11, Ein16b, HBL+13, RK11]. **modes** [AM19, ALSW14, Bal19, CS17, HSK+12]. **modifications** [RL10]. **Modified** [LYL+17, NIK+12a, ZLL18, BKN+17, DFM+15, Duf16, FZY13, GSZ13, Jiw15b, KMS14, LM19, LCQF18, MS15, Ras09, Ras17, SMJ17, SBvD13, XHLUF+18, ZY19a]. **Modular** [CFW17, Giu19, Sin11, Sin12a, DLGP10, FWS+17, KP16, KSH14, Kro16, TCK+15, Zag14]. **modulated** [TTG11]. **modulation** [Kap16, OCL+13]. **module** [DF11b, DGST17, GST12, LRK13, SK12]. **modules** [AAB+10a]. **moduli** [Bog16]. **MOLDY** [ADD+11]. **Molecular** [AS16, DLGP10, Fil14, FFIH11, GM11, HLZ+13, LS17a, MTSI11, MKB+11, Ngu17, NLB+19, SBPN15, SYE+18, TD17, ZS13, Zhe15, ADD+11, Bar11a, Bar12a, BBH11b, BBB+19, BPML12, BKS15, Bin13, BG13a, BG14a,

BGHN19, BWPT11, BKPT12, BY13, BCG+15, BBV+16, BMDP19, CTT17, CMM14, CXH+15, CZZ+19, CSP+19, Col14, DEW16, DES+11, DRR15, ESM17, FSH13, FCVH17, FRG12, FP14, Gar19, Gio14b, GLR17, GNA+15, GRR+14, GJHF14, GTK+19b, HST+11, HYM11, HXW+13, HAN+16, HBH+17, HWL+17, HVMR10, HKVR10, HM17, HL19c, HDM+12, JWL13, JPH+14, JTT11, JKIS16, KRM+19, KST14a, KPA13, KKCC19, KDM11, Kon11, KKS18, KS15, KHN19, LGW13, LS12b, LHZ11, LK15, LLZ+17, LBR+18, LRR+17, MDW16, MGRB11, MM17, Miu11, MSH11, NBW16, NFA+16, NB17, NPAG11, NP19, iNSK+15, OKM12, OYK+14, PLCC12].
molecular
[Rap11, Rei11, Rei12, RKGC+17, SMOB19, SGM18, Sco13, SOM+13, SC16a, SMO16b, SCM14, SCM13, SAG13, SA14, TM19, TS11, VBG+10, VK14, WJCZ18, WZHE18, WSI13, YK12, ZBG+16, ZPH+15, ZZHG18, dBCH14].
molecular-continuum [NFA+16, NB17]. **molecular-dynamics**
[HYM11, MSH11]. **molecular-hydrogen** [BKS15]. **molecule**
[ART17, CNMC10a, CNMC10b, EY11, EBDM17, Faw10, LJSW11, WG16a].
molecule-fixed [CNMC10a, CNMC10b]. **molecules**
[AKV18, BGHN19, BRH+16, CRNK12, DVB11, FS17, FCCTFR18, GNT17, HL19b, Kob13, LRR+15, MGB18, PZY16, Sit18, TC11b, WFM14, Yan11, YLTS16, ZYZ15, ZZ15, ZMCT12]. **molgw** [BRH+16]. **Møller**
[KK14a, KBB+17]. **molscat** [HL19c]. **MolSOC** [CL14]. **MOM** [LHC+13].
moment [HKPF19, KKG+15, LLX14a, MMA15]. **moment-independent**
[LLX14a]. **momenta** [AC16]. **moments**
[DBP19, MSR+17, MK19, RE12, SVGS18]. **Momentum**
[HHC+10, BAK+15, BAK+16, BAK+17, CC19, DSM+11, EUT+15, HKJ+12, MGB18, MMT+11, Trö11, Wei99, YK18]. **Momentum-time** [HHC+10].
monolayer [OCL+13]. **monopolar** [ZDWY10]. **monosized** [AYDY11].
monotonic [SC15]. **monotonically** [HRC11]. **Monte**
[AIG16, CK19, HKZN17, HKZN19, JPSS10, KLO+19, MBRV+13, NSXZ14, OPO+11, OPSR13, TDL+14, Urb18, WLZN17, ZTG14, ZDD+13, AFIS12, ASGLK10, AK15, ABB+14, ASPDL+16, Ano10o, AK13a, AK13b, AMJ18, BKV16, Bar11a, Bar12a, BDP16, BVP10, BG11, BMW14, BG13b, BLG14, Bon15, Bon16, BHJ+19, BMDP19, BENK+17, CXG+19, CL11, CZGC19, CL15b, CKS10, CNS+14, CI11, DSHS17, DGPW11, DEMM19, DPK+15, Dem11, DDKM15, DKT14, EBDM17, ES11, FGGM11, FLE19, FW11, FDWC12, GTPS19, GA15, Gin10, GSB+14, GWF+11, GB17, HBE10, HMR14, HP11, HWM+15, Hua17, IUM13, JLA+14, JA17, KOT12, KMO19, KEH12, Kan14, KRW13, KC14, KKK+17, KNS+17, KV19, KSW15, KPVvdH13, LS14, LS15a, LS15b, LLE+18, LWL11, Lut15, MP11, MRZ10, MEM+11, MW14, MHR+13, MMY+19, NPAD11]. **Monte**
[NHD16, NDSH18, NBCL18, NM14, OPR14, PZL+19, PEMS19, PM14, RF16, Ram19, RMS+12, RV10, RV11, RB18, SI11, SGNL17, SFP11, SL16, SHT18, SMJ17, SM19, SD14, SKFP16, SLZ16, SSF+14, SKM15, SKSK13, TZG12, TVZ+15, Tic10, Tic14, TKP12, TMS19, TU14, Trö11, UKKB19, UA17,

VK14, WRFS15, WDL11, WSTP15, WBS+18, WvSL13, WT12, WWVB11, XGH+19, YWOD19, ZBG+16, ZLM12, ZTG13, dSF18, dHGCS11].
Monte-Carlo [DPK+15, LS15a, NBCL18, PEMS19, SM19, UKKB19].
MonteCUBES [BFM10]. **MonteGrappa** [TVZ+15]. **monteswitch** [UA17].
MoRiBS [ZBG+16]. **MoRiBS-PIMC** [ZBG+16]. **morphing** [ZF15].
Morphological [MS11]. **morphologies** [Bar11b]. **morphology** [PR10].
MOSFET [SO19]. **Moshinsky** [XMLC16]. **most** [BS14a]. **Mosyagin** [Maź19]. **motile** [HPKF15]. **Motion**
[KB15a, BMG+15, HH11a, MF17, SBPD19]. **Motion4D**
[MG10b, Mül11b, Mül14b]. **Motion4D-library** [MG10b, Mül11b, Mül14b].
motors [SKM15]. **moves** [AMJ18, RV10]. **Moving**
[YJK11, AKKK16, DCU+19, GZZ19, JvOK17, KS16a, LP15, NHSY15].
moving-grid [DCU+19]. **MP2** [KK14a]. **MPBEC** [VPM16]. **MPI**
[ARYT17, ART17, BW12a, BCM+16, BTC+17, DRUE12, EZBA16, Hin11, LYSS+16, OLG+16, OKM12, SSB+16, SCJH19, TKP15, TK19, WAW14, YHL11]. **MPI-AMRVAC** [TK19]. **MPI-based** [OLG+16]. **MPI-driven** [Hin11]. **MPI/GPU** [EZBA16]. **MPI/GPU-code** [EZBA16]. **MPL** [Bog16]. **MPLS** [NHSY15]. **MPPhys** [Mül14c]. **MPS**
[SIMGCP14, NHS14, SIMGCP13]. **mr** [KPV16]. **MRT** [vdS10]. **ms** [DES+11]. **ms2** [GRR+14, RKGC+17]. **MSSM**
[CRC+13, DNPS13, FEH11, FHH+14, HP17, HLM13, HEF12, KZ11, LCE+13, PS12, RCD+10, Ros15, SV12]. **MsSpec** [SNG+11]. **MsSpec-1.0** [SNG+11]. **MSTor** [ZMCT12, ZMPT13]. **MT** [HHP+14]. **MuFA** [RJW+19]. **muffin** [LZP12]. **muffin-tin** [LZP12]. **Multi**
[BFPP12, BBS14, BVP10, BMW14, CZS10, ELDS14, FBN+13, HDZ14, IBP+15, KO13, Kom15b, KSW15, Liu14, MKR+12, MRSD15, OP12, PP13, RJW+19, SW14b, SM19, SCM+18, TPC16, Ume19, UBRT10, YKK+19, ZST11, ZMvE+13, ASS13, AZM14, BBU11, BBUY13, BBB+17a, BT17a, BT17b, BAR12b, BCH13, BHJ+15, BHJ+18, BvH15, CWJ19, Cap13, CC15, CL15b, DBP+18, DKG+14, DE13, DCVB+13, DGS+19, DO14a, Er14, FSJ+16, FHA17, FB19, DRI+16, GBC+18, HLS+17, HZW+19, HWT10, Ike18, JK14, JXTS16, KPA13, KO12, KO14b, Kom15a, Kom15c, KO16, LLQX19, LS12a, LHZ11, LQ18, LY16, LBP15, LRK13, Mey18, MMA15, NNWS15, NHD16, NB17, NAQ16, Pál12, PR14, PC11, QSC14, QZWU19, QwWL+15, RZ19, Sch14a, SV13, SGW17, SLR+11, SC16b, TRM+12, TD14, TKJ19, TDL+14, Vuk12, WSH+12, WAW14, sX14, YZWR14, Yi11]. **multi**
[ZAFAM16, ZMPT13, dDYK+18, REtVH12, RtV16, FOB+15, IBP+15, WFZG19]. **Multi-algorithm** [Liu14]. **Multi-architecture** [SM19].
multi-array [Vuk12]. **Multi-axis** [YKK+19]. **multi-baryon** [DE13].
multi-beam [FB19]. **multi-bunch** [FB19]. **multi-center** [BAR12b].
Multi-Channel [KSW15, LLQX19]. **multi-cluster**
[KO12, KO13, KO14b, Kom15a, Kom15b, Kom15c, KO16].
multi-component [HLS+17]. **multi-configuration** [QZWU19]. **Multi-core** [FBN+13, HWT10, LHZ11, TRM+12, TDL+14]. **Multi-core-CPU**

[ELDS14]. **multi-CPU** [FOB+15]. **multi-degree-of-freedom** [Er14]. **Multi-dimensional** [MKR+12, ASS13, BT17a, Cap13, CC15, DO14a, NAQ16, TD14]. **multi-directional** [TKJ19]. **multi-disciplinary** [WSH+12]. **Multi-Domain** [IBP+15]. **Multi-electron** [BMW14, SW14b]. **multi-exponential** [Ike18]. **multi-flexible-body** [KPA13]. **multi-floor** [PC11]. **multi-fluid** [SLR+11, sX14]. **Multi-frequency** [PP13, LY16, YZWR14]. **MULTI-fs** [REtVH12]. **multi-gluon** [BBU11, BvH15]. **Multi-GPU** [BFPP12, BVP10, OP12, TPC16, DCVB+13, JK14, JXTS16, LBP15, NHD16, WAW14, FOB+15, WFZG19]. **Multi-GPU-based** [KO13, Kom15b]. **multi-GPUs** [SV13]. **multi-instance** [NB17]. **multi-Intel** [BBS14]. **multi-jet** [BBUY13]. **Multi-Kepler** [BBS14]. **multi-layered** [CL15b]. **multi-level** [HZW+19, IBP+15]. **multi-loop** [BCH13, Mey18, dDYK+18]. **multi-material** [SC16b]. **multi-million** [RZ19]. **multi-mode** [LRK13]. **multi-moment** [MMA15]. **multi-objective** [AZM14]. **multi-orbital** [QwWL+15, SGW17]. **multi-particle** [BBB+17a, LQ18, PR14]. **Multi-phase** [MRSD15, BT17b, FHA17, ZAFAM16]. **Multi-physics** [ZMvE+13, DRI+16]. **multi-populations** [FSJ+16]. **multi-purpose** [DBP+18]. **multi-reference** [DKG+14]. **Multi-resolution** [SCM+18]. **Multi-scale** [UBRT10, BHJ+15, BHJ+18, Sch14a]. **multi-socket** [TRM+12]. **multi-soliton** [Pál12]. **multi-species** [DGS+19, NNWS15]. **multi-spin** [BVP10]. **Multi-step** [Ume19]. **multi-strategies** [FSJ+16]. **multi-structural** [ZMPT13]. **Multi-symplectic** [CZS10, HDZ14, ZST11, CWJ19, LS12a, QSC14]. **Multi-type** [RJW+19]. **multi-user** [GBC+18]. **multi-zone** [Yi11]. **multiband** [Bot12, HHC16]. **multiblock** [HdM16]. **multibubble** [WSI13]. **Multicanonical** [KI11, BB13a, FLE19, GZWJ18, SI11, ZMJ13]. **multicellular** [HFOPF15]. **multichannel** [GMRHRCME13, HBP14, NFI17]. **multicomponent** [YSLY19]. **Multiconfiguration** [BSGG10]. **multicore** [AEKO18, HdM16, HWCdM19, Lya15, MPM14, TH17, YHL11]. **multicore/vectorisation** [TH17]. **Multidimensional** [CHA11, End11, FKS+19, LW14b, WW10, ZF15, ZLM12, Asc10, AM17, GMHZ19, KBSP12, QSB19]. **multidomain** [DT11a]. **multifluid** [RC15]. **multiframe** [SGDS16]. **Multigrid** [ABF19, FZR19, BKOZ16, Bot13, FN17, HVP+19, TE18, TK19]. **multilayered** [LPRPR17]. **multilevel** [MCWJ15, OL12, ZZHG18]. **multilevel-skin** [ZZHG18]. **multiloop** [SST11, Smi14]. **multimode** [Brá15]. **Multiparticle** [HPN18, WSH+14]. **Multiphase** [ZLFM11, HSF+15, LOK+18, MPM14, NHSY15, TSK+17, YK19]. **multiphoton** [TC11b]. **multiphysics** [ZLFM11]. **Multiplatform** [GHK19]. **Multiple** [ELL+17a, Jab17, XNK+16, ATA+19, AKR15, BAF18, EBCB+14, GLAC13, GM18, HLZ+13, JA17, JPH+14, Kap12b, Kaw19, Kra18b, LWES18, STK10, SNG+11, SCM14, TKS10, TACA15, VK14, Wai12, WMK11, WXW13, WJHW14, WWM14, YL12, BBV10, CYN19]. **multiple-histogram**

[VK14]. **Multiple-Relaxation-Time** [CYN19]. **multiple-trapping** [JA17]. **multiplication** [GJ18a, WWR+16]. **multiplicities** [Wei12]. **multiplicity** [Car16]. **multiplier** [AQJ10, TC11a]. **multiply** [BG13b, BG14a, BLG14, Bon15, Bon16, WLG+13]. **multiply-charged** [BG13b, BLG14]. **Multipole** [CC10b, CC12, GB11, GCH+18, Ham11, LCQF18, LCHM10, LCHM13, OYK+14, TSIM16, YBK+11, YBNY13, ZHPS10]. **multipoles** [EPP12]. **multiprecision** [Sai13]. **multirate** [SEGP15]. **Multiresolution** [LB10b, RHH12]. **Multiscale** [BLV+19, AKH+18, CH19, CZ18b, GTK+19b, HBL+13, KFS17, KK13, LHB+19, RLBC+14, SMO16b, ZOZ13, ZZG+16, CHZ18]. **multispin** [FFT+14]. **multisymplectic** [CWS14]. **multithreaded** [TV10]. **multivariate** [CSRV13, KPVvdH13, LR18a, LR18b, vH10]. **MultivariateResidues** [LR18a, LR18b]. **multiwavelength** [SSP16]. **MuMax3** [RJW+19]. **muon** [NBCL18]. **muons** [BCMS10]. **MUPAGE** [BCMS10]. **Muse** [Liu14]. **mVMC** [MMY+19]. **mVMC-Open-source** [MMY+19]. **mxpfit** [Ike18]. **myFitter** [Wie13].

N [CKFB12, CDTV10, GBD10]. **N2HDECAY** [EMW19]. **N2HDM** [EMW19]. **Nabarro** [PE17, ZLZ19]. **NAMD** [BW15, JPH+14, JJ15, MPB10]. **NAME** [MFH+13]. **names** [WCT11]. **nano** [HST+11, HEF+11]. **nano-devices** [HEF+11]. **nano-friction** [HST+11]. **NanoCap** [RM14]. **nanochannels** [SS11c]. **nanoclusters** [FSJ+16]. **nanodevices** [CLL16]. **nanodiamond** [AZS+11]. **nanofiber** [LPC+15]. **nanographite** [AZS+11]. **nanomaterials** [Mar19]. **nanometric** [ZHCR18]. **nanoparticle** [Bar11b, YHCS11]. **nanoparticles** [CKLM10, HT12, Nov17, SWL+15]. **Nanoporous** [ZDD+13]. **nanoribbon** [LCY+11, SWL11]. **nanoribbons** [GZL14, Ihn12]. **nanoscale** [Dan14, Dan16, Dan17, Dan19, LCH11]. **Nanoscience** [NSH+19]. **nanoscopic** [EVB14]. **nanostructured** [NPM16]. **nanostructures** [BMC+11a, BW16, DSS+12, DGMZ15, GTG+11, GAO13b, HHC16, MCP10, RZ19, Wie18]. **nanosystems** [GS15]. **nanotube** [LCY+11, TM19, Yan11]. **nanotube-nanoribbon** [LCY+11]. **nanotubes** [Beu11, CSL+13, HCC14, LHSL14, RM14, ZRS12]. **nanowire** [DJ12]. **nanowires** [CM15, TG11, VB11]. **NAO** [KBSP19]. **NAPL** [PBF+16]. **NASAL** [CPCDdM18]. **NASAL-Geom** [CPCDdM18]. **Natural** [BHT19, OP12]. **Navier** [BKOZ16, BLAS19, EW14a, FDZ17, LWJV18, MVS15, QSB19, Sal16, SK15, SP18b, ZPS+18]. **NBL** [KHN19]. **Nd** [LQZ+13]. **NDL** [HAV+14]. **NDL-v2.0** [HAV+14]. **ndom** [SKB10]. **Ndynamics** [ADdM+12b]. **Near** [BKMP16, AGVP10, CZF18, DT11b, EEGW12, Faw10, JU17, LPRPR17, MZE13, TKL+12, Uty14, XD13, XHD15]. **near-barrier** [DT11b]. **near-continuum** [TKL+12]. **near-field** [CZF18, LPRPR17]. **near-rigid** [Faw10]. **Near-threshold** [BKMP16]. **near-wall** [JU17, Uty14]. **nearly** [LYL+17]. **nearly-analytic** [LYL+17].

necessary [BSWC14]. **neighbor** [ABRS12, HAN+16, KHN19, LYJY10, ZZHG18]. **Neighbour** [MRZ10, WRR18]. **Nektar** [CMC+15]. **neoclassical** [BSM13, HSK+12, MS14, SISW10]. **Nernst** [Fuh15]. **Nested** [BBV+16, BH11, SEGP15]. **Network** [VKLM11, VLM11, DLW+18, HH11b, LYJH19, ORCR17, YKK+19, dSLF13, ZHL11]. **networks** [BHVMH15, CHDF10, CB15c, CMdB11, CF17, CLF18, HLS12, HZC19, IBKK11, Kra10, MCNRC16, NMCR15, PHA18, QHC+10, SOYHDD19]. **Neumann** [RC16, Jiw15b, RC13, RTA10, SP16, SN16]. **Neural** [ORCR17, ZHL11, dCD19, HZC19, LYJH19]. **neural-network** [LYJH19]. **Neutral** [BRL12, AGB+15, BBH+11a, Lit13, PE15, Tic14]. **neutral-particle** [Tic14]. **Neutrino** [BFM10, AKH12, BPMM14, BNAB11, KHBS19]. **neutrino-driving** [BNAB11]. **neutrinos** [WW15]. **NEutron** [Car16, BNV18, CXG+19, ECSH16, KB15b, LS12b, RLS16, SEW12, SEW14, VPM12, WJCZ18, ZTG13, ZTG14]. **neutron/gamma** [RLS16]. **Neutron_CR** [MSNI11]. **Neutron_CR-39** [MSNI11]. **neutronics** [YLL+19]. **neutronics/thermal** [YLL+19]. **neutronics/thermal-hydraulics/fuel-performance** [YLL+19]. **neutrons** [MSNI11]. **newly** [CWW15]. **Newton** [BK12, CB15d, HCSW10, YJK11, vWB10]. **Newton/Yukawa** [BK12]. **Newtonian** [BHNS17, NCB18, RJLL16]. **Next** [AAT+14, AAT+20, AC17, AMRdA17, GLPQ11, PLF+17, DET12]. **next-generation** [PLF+17]. **Next-to-Minimal** [AAT+20, AAT+14, AC17, AMRdA17, DET12]. **next-to-next-to-leading** [GLPQ11]. **Nexus** [Kro16]. **NF** [YE14a]. **NF-package** [YE14a]. **NGluon** [BBU11]. **ngravs** [Cro16]. **Ni** [BTM+17, CHW+15, TG11]. **nickel** [WBY11]. **Nicolson** [BB10, CWS14]. **Ninja** [Per14]. **NiTi** [NS11b]. **nitride** [Yan11]. **nitrogen** [CHC+11, LJSW11]. **Nix** [Rom15]. **NLO** [BDC+14, BCG+13, BS13b, GHvSF14, Pit10]. **NLS** [lLsSZ14]. **NLSEmagic** [Cap13]. **NMSDECAY** [DET12]. **NMSSM** [AM11, BGM+14, SAE+16]. **NMSSMCALC** [BGM+14]. **NN** [LYJH19]. **NNDrone** [BG19a]. **NNLO** [HLM17, BHZ13]. **nnlo-Higgs** [BHZ13]. **nodal** [Koh15, Oti13]. **nodal-based** [Oti13]. **node** [CTL15, NZQL14, SC16b, ZBN+19]. **node-centered** [SC16b]. **nodes** [Sch14b, YKK+19]. **noise** [BCS10, BDBV12, CC10a, Er14, HH11b, KS16b, MW12, VSG18]. **noises** [iT11]. **noisy** [QHC+10]. **noloco** [NPAD11]. **NOMAD** [GHK19]. **Non** [FW11, GTK+19a, Gor19, Jal10, VDA+19, WL11b, AAD13, ABF19, ABH+18, AMJ18, BL19, BHNS17, BL14, BDP16, BW12b, Bla15, BCT17, BH13, BPS+16, BMG+15, CLW11, CdLOL19, DBJ11, DJ11, EW16, FR15, HWS16, HM17, HHM+15, HL19c, JBKM15, JU17, KKSY18, KS15, LMRC15, LA13, LS15b, LFG14, NCB18, OILK17, PHT+19, PLF+17, PBF+16, PBD+15, SK15, SCLW16, SCNJ18, SC15, SS11b, SLEF17, TDL+14, UNK12, USOA13, Wit14, YQM12, YQM14, ZDWM17, ZXZ+19, dSFdFF13, dSVLP13]. **non-adiabatic** [HM17]. **non-aligned** [HWS16]. **non-autonomous**

[Bla15, BCT17]. **non-axisymmetric** [EW16]. **non-bonded** [BL14]. **non-Boussinesq** [BL19]. **non-circular** [OILK17]. **non-conformal** [ZDWM17]. **non-crystalline** [DBJ11]. **non-degenerated** [ABF19]. **non-equidistant** [LS15b]. **non-equilibrium** [BPS+16, JBKM15, PLF+17, PBD+15, SC15, ZXZ+19, dSFdFF13]. **non-Hermitian** [BW12b]. **non-homogeneous** [SCNJ18]. **non-ideal** [TDL+14]. **non-inertial** [SS11b]. **non-intrusive** [HHM+15]. **non-isothermal** [PBF+16]. **Non-linear** [Gor19, VDA+19, FR15, PHT+19, SLEF17]. **Non-local** [GTK+19a, AMJ18]. **non-Markovian** [dSVLP13]. **non-minimal** [KKSY18]. **non-Newtonian** [BHNS17, NCB18]. **non-orthogonal** [USOA13]. **non-oscillatory** [AAD13, DJ11, UNK12]. **non-overlapping** [JU17]. **Non-perturbative** [WL11b]. **non-planar** [BH13]. **Non-polynomial** [Jal10]. **non-reactive** [HL19c]. **non-rectangular** [SK15]. **Non-reversible** [FW11]. **non-spherical** [BMG+15]. **non-staggered** [DJ11, SCLW16]. **non-SUSY** [ABH+18]. **non-transferred** [CLW11]. **non-uniform** [BDP16, KS15, LA13, LFG14, Wit14, YQM12, YQM14]. **nonadiabatic** [SOM+13]. **noncentral** [GST15]. **nonclassical** [Shi16]. **nonequilibrium** [KH10, MDF11]. **Nonextensive** [Fri14a]. **nonhydrostatic** [BB12]. **Nonlinear** [Asi10, BAR12b, Cap13, AAD13, ABB13, ABH+19, BSM13, CWS14, CB13b, CZS10, Che17, DG10a, DT10, DS10, DT11a, DM17, Dem13, DZ13, DBLF16, Er14, EFK+19, GLHR19, GAO13b, GRLS18, HZC19, Jan10, JCL+18, KS19, Kau13, KL11, LD10a, LV19, LWL12, LST15, LLL12, Lin13, LLL13, sL10, MD11a, MHWH19, Mel19, MFM15, Moh14, ICD13, PDRG10, PTS12, QSC14, RM10a, SW14c, SK14, SB11, SS10b, TD14, TJH17, WP10a, Wil19, XZ12, YÇÖ15, ZAHA10, ZWLZ17, ZY19a, ZLL13, ZW15, ZST11, Zió14, dlHV10]. **nonlinearity** [SB11, VEB+18]. **nonlinearly** [CC14, CC15]. **nonlocal** [LAA+10, LLMW17, TRN16, YZ19, ZY19b]. **nonresonant** [Shi16]. **nonuniform** [ZNT15]. **nonzero** [BBF+10]. **norm** [GVPJ18, LWW10, vSGB+18]. **norm-conserving** [GVPJ18, vSGB+18]. **normal** [AG12a, BCJW13, BMF+19]. **normalization** [MZE13]. **Normalized** [XHLUF+18]. **NORSE** [SLEF17]. **Not-a-Knot** [SD10b]. **note** [SW13b]. **Novel** [UW12, dSFdFF13, Ano20, EKK14, FS17, KK16a, KDM17, LDR+17, MSPD12, MPM14, RTA10, Ser10, WAW14, WZS+18, ZDWY10, ZSW+17b]. **NPB** [Yi11]. **NPS** [EBDM17]. **NRMC** [SGNL17]. **NSBC** [Bab14]. **Nt_STM** [MAC12]. **NTPoly** [DN18]. **Ntuples** [BDC+14]. **Nuclear** [DBP19, VCMS+13, ASA18, AANAJ12, BNV18, BBC+13b, CDTV10, Des16, DPB16, GG16, GFJ+14, GBJ+15, PDL+18, SZY+12, SHZ13, SAY+18, Shi16, SUS+17a, Tom16, ZSW+17b]. **nuclearity** [DRR16, RRCSCJ10]. **nucleation** [JJB11, RDP14]. **nuclei** [Bab14, DT11b, DML+16, GC10, GC13, GC16, GCK19, LMAB16, NPVR14, PUO14, WSI13]. **nucleon** [AHK+12, GBD10]. **nucleus** [GC18, KMO19, WR16]. **nuCraft** [WW15]. **nudged** [QDZ+13].

NUFFT [Giu19]. **null** [HLW16]. **null-space** [HLW16]. **nullity** [YE14a]. **number** [ASPW13, BS11, BS13a, BS14a, BJCW13, BCJW13, CBGY17, CBYG18, Dem11, FP14, GP13, GBS16b, Kan18, LS15a, LNP+17, Mis13, Sav15, SS13a, Sib17, SCM+18, TC11a]. **numbering** [BBC+13a]. **numbers** [BS13a, BCJW13, Nog17a, Nog17b, UO15b, YB13, ZOZ13, ZNT15]. **Numeric** [GBRB11, KCA+15, LRW+15]. **Numerical** [ABRS19, ASEA14, ACCB13, ALSW14, AD11, ACM12, AH13, ADdM+12b, BBUY13, BCH13, BHJ+15, BMNS14, BS12, BvH15, CMJ+11, DG10b, DGS+19, DR12, FGLB12, Fis12, Fuk17, GG16, GLX+14, HKSW10, HK12, HML11, HW11, HB13, HL13, Ixa16, JL12, JLM18, JPM12, JK13, JHL+15, KFS17, KM10, Kri12, LMRC15, LD10b, LSF14, lLsSZ14, MT13, MIW+13, MFS+10a, MC12, MM10, PKT15, PBF+16, QwWL+15, RC15, RAV11, RJ12, RGKR17, SW12b, TGUvS19, VBMS17, Wie13, XJS16, XYM+13, YdDH+12, ZFH14, ZDWY10, ZY19b, ZW15, dlHV12, AS11b, AB10, AGH+16, ACMM10, ACML11, AAT17, BK16a, BSK+18, BCM+16, BDGG19, BHJ+18, CLHL19, CL10, CLL16, CvW12a, CvW12b, CFFR15, DMP18, DCC+10, DCM+12, Dat13, DS13a, DBD+17, DN13, DM17, Den10, EZL+16, EVB14, FSC13, Fuh15, GHvdL11]. **numerical** [GV15, GA10, GN14, Gri11, GSKM15, GM14, GMHZ19, HAV+14, HVMR10, HCSW10, Ixa10, JK10, JTN+11, JWL13, JZZ+19, Jiw12, Jiw15a, Ker17, KZ11, KL17, KKL+18, KAS12, KBSP19, KST+14b, KP14, LV14, LK12, LYX+17, LHH+12a, MD11a, Mar15, MW19, MN16, MA11, ML16, NGCI+12, PAS11, PMMW15, PVK+18, PQTGS17, PO14, Pit10, PE15, PDJ10, PB16, RM10a, RM10b, RLS16, Sal12, SKB10, SLY18, SL17, SH18, SW14c, SS11a, SD10b, SS13b, SK14, SST11, Smi14, SAS11, SPS18, SCG11, TKR13, TZM17, TFBW14, TL19, TO10b, VLD+12, WX11, Wu10, WL11b, XLL15, YZ16, YWYF09, YXD+15, YXT+15, ZY19a, Zió14, dB14, dDYK+18, vMB14]. **numerically** [BMBC+17, DGST17]. **numerics** [TK14a]. **NumExp** [HL13]. **NuSol** [GG16]. **NVIDIA** [GNP19, Lya15, MR14]. **NVM** [MNV13]. **NWChem** [LSK+14, VBG+10]. **nX** [BFD+11]. **NXSG4** [KB15b]. **Nyström** [FG13, KMS14, KAS12, WW10, YZWR14]. **Nyström-tree** [YZWR14].

O [ADH+17, CJH11, LS11, Maź19, CKFB12, BABC19, DRUE12, GGI+13, SKK+19]. **O-SUKI** [SKK+19]. **Oasis** [MVS15]. **Obituary** [Sco19]. **Object** [BC19, CB15a, CB17, CB18, Asl14, BFD+11, CDMCN11, CJ12, CFFR15, DM12, HHP+16, OKM12, SL16, WP10a, Zag14, CF16, FCC15, MBRV+13]. **Object-oriented** [BC19, CB15a, CB17, CB18, Asl14, BFD+11, CDMCN11, CFFR15, DM12, OKM12, SL16, WP10a, Zag14]. **objective** [AZM14]. **objects** [AKKK16, CGJ14, GGF+13, GSC+16, JvOK17, KCS+15, OL12, Ser10]. **oblique** [ÇÖSÜ11, VDB14]. **Obrechkoff** [SS13b]. **observables** [AM10, AM11, AMR19, BBPS14, MKV11, Mur14]. **observations** [BVC13]. **observatory** [BPMM14]. **observed** [UIY11]. **obstacle** [OK14]. **obstacles** [KL11]. **obtain** [CLB11, EBDM17]. **obtained** [LS19]. **obtaining**

[LP15, Liu13, MNPY14, MYP+14]. **ocean** [DBLF16, DBLF16]. **OCTBEC** [Hoh14a]. **Octree** [FGC+11, TE18, TK19]. **Octree-based** [FGC+11]. **ODE** [HKSW10]. **ODEs** [KV10a, NO12]. **off** [HFOPF15, JCL10, JTP15, JHL+15, KdMvO14, MRZ10, RV10, SMOB19, Zag14]. **off-axis** [JTP15]. **off-lattice** [HFOPF15, KdMvO14, MRZ10, RV10]. **offload** [BCG+15]. **offs** [NBN+14]. **ohmic** [KGG+16, YLKN17]. **oil** [ZAFAM16]. **OK2** [OKP10]. **OK3** [OKP10]. **old** [TBB+14]. **on-lattice** [XLCW14]. **on-the-fly** [GGG16]. **ONCV** [SG15]. **One** [ADH+17, CHC+11, DLU18, EGPS10, ABB+14, AG14, Ano10o, BBU11, Ber16a, Ber16b, BDP16, BDV11, BHJ+15, CZD15, CEZ16, CJH11, CR12, CvW12a, CvW12b, CGH+11, DDH17, Dua10, Fen12b, Fil13, FEH11, HLS12, HEF12, HHC+10, JWC18, KKSY18, KS12, LS19, Liu11, Liu13, LKT+16, MCA17, MP11, MEM+11, OAKS11, Pat15, Pat17, Per14, QA13a, RtV16, RVA14, Rei12, RCH16, RGKR17, TD14, Ter17, WHG+19, vH11]. **one-** [TD14, WHG+19]. **One-dimensional** [CHC+11, AG14, BDP16, CZD15, CR12, CvW12a, CvW12b, Dua10, Fil13, HHC+10, KS12, MEM+11, QA13a, RtV16, Rei12, RCH16]. **One-Loop** [ADH+17, DLU18, ABB+14, Ano10o, BBU11, CEZ16, CGH+11, DDH17, Fen12b, FEH11, HEF12, KKSY18, Pat15, Pat17, Per14, vH11]. **one-particle** [LS19, Liu11, Liu13]. **one-shot** [HLS12]. **one-valence** [MCA17]. **one-way** [OAKS11, Ter17]. **OneLOop** [vH11]. **onetep** [BDPM15]. **Onia** [Sha13b, Sha16]. **online** [HDF+19, Mis13, PR14, TdAdSS11]. **only** [Sta14]. **Open** [BCP+16, CYOS19, CDR+15, DSK19, DBLF16, JWC18, MMY+19, SH18, WGG16, WGG+19, AZ17a, AZ17b, AFZ17, AFZ18, ATCZ19, CMC+15, CLJ12, CFW17, CCHL11, Dan11, DGJH19, Dat13, DBP+18, FLA+16, Faw10, FJK+17, FLW17, HSF+15, HKvH16, HWM+15, Hua17, ILZ+19, JNN12, JNN13, JMG+17, KDM17, KPK+17, KSH14, KPOR18, LPC+15, LZ11a, LZ11b, LZ12, LS13, MZE13, MVS15, MGFRG12, NMS14, NGCI+12, ORS+14, PLCC12, Qia16, Qia17, STA18, SV14, SC16a, SPAW17, SAHP15, SDL+16, TL17, TACA15, TVT+16, VBG+10, VDA+19, VS19a, VB19, WFDK19, WFV14, WPAV14, WZS+18, XAPK14, ZCG17, Zag14]. **open-shell** [Faw10]. **Open-source** [BCP+16, CYOS19, CDR+15, DSK19, DBLF16, AZ17a, AZ17b, AFZ17, AFZ18, ATCZ19, CMC+15, CFW17, Dan11, DGJH19, DBP+18, FLA+16, HSF+15, JNN12, KDM17, KPK+17, KSH14, LPC+15, LZ11a, LZ11b, LZ12, MZE13, MGFRG12, NGCI+12, SC16a, SPAW17, SAHP15, TACA15, VBG+10, VB19, WPAV14, WZS+18, XAPK14]. **OpenACC** [GM18, HTJ+16, Kom15c, SCJH19]. **OpenAtom** [KMM+19]. **OpenCL** [BLPP13, BHW+12, BBH+15, CP15a, HD11, KM10, MAIVAH14, ÓN12, RBB15, TKP15]. **OpenFOAM** [Cha19, CL13, DBMR18, LBR+18, LNSD15, MTE17, MRL19, SSX14, WBS+18, ZCG17]. **OpenFOAM(R)** [JHH+19]. **OpenFPCI** [HMR+19]. **OpenFPM** [ILZ+19]. **Opening** [JWC18]. **OpenMM** [BCFR15]. **OPENMP** [OKM12, CBYG18, GSMK17, KT10, KLM+19, LYSS+16, SSB+16, YHL11, YSVM+16, YSMA+17]. **OpenMP/MPI** [LYSS+16, SSB+16]. **OpenPhase** [TSK+17]. **openPSTD** [HKvH16]. **OpenSMOKE** [CFFR15]. **opensource** [MGR16]. **operated**

[LM19]. **Operating** [SC14]. **operational** [dlHV12]. **operations** [CB18]. **operator** [ABB+16, ABF19, BK11a, BW12b, BBF+10, BF10, DGS+19, Eks11, GTS14, JHL+15, KAK12, MWI+19, NNWS15, PB16, Ram10, Sch14a, STY15, STY18, Zit11]. **operators** [Brá15, LYL+17, SD10a, Vit19]. **Opinion** [YH15, CHDF10, IBKK11]. **OptaDOS** [MNPY14]. **OpTHyLiC** [BCTP18]. **optic** [FNPMB10]. **Optical** [AWK+16, Ost10, PGMU19, AM14b, APRG11, AKV18, BF16, Bal19, BD10, BG11, BGL+14, BMG+15, CM15, CCL15, CS17, CCW10, CSL+13, DSS+12, FE11, GGG16, HCRD14, HWCH11, HHT14, LCCC11, LLMW17, MNPY14, NJS17, OCL+13, PM14, SSM+17, VEB+18, VCD16, WX11, WQ18, ZHCR18, ZYL+19]. **Optics** [NSH+19, Dem13, KAH18, SWS+12]. **Optimal** [FBHB17, KKCC19, MLEM19, CNMC10b, DJ14, FSF11, FJ19, Hoh14a, Ike18, MFS+10a, PSBT12, PGMU19, RC18, SH18, SJHS19, XLL15]. **optimality** [KL14]. **optimisation** [EGT+18, HdM16, dCD19]. **optimisations** [HKZN19, HWCdM19]. **Optimised** [IZRT15, RWKS15, Wei12, BCTP18]. **Optimising** [Rei10]. **Optimization** [BS14b, DF14, DCGG13, FGR14, MCY+16, SG15, ATA+19, ACdS13, AZM14, BS15a, BR11, BPS+16, CM10b, CLH+17, CJJ+17, CXG+19, DBJ11, FSJ+16, DRI+16, GWF+16, GD14, Has11, HWL+17, HJL+14, HVMR10, HKVR10, JKG+18, KPA13, KKP11, KHKR14, Kra11, KH19, KUV15, KL14, LM19, LHL16, LCRL10, MR14, MBGV15, PCVZ11, QwWL+15, RMS+12, RLL12, SHW18, SWL+15, SZM+14, SKH+10, TTT16, VvAV+11a, VPP+12, VHP+15, Wie18, WLZN17, XLCW14, YZZ+17, YLYL17, ZBMM11, ZPvR16, Zlo14, dASJC+19, vRWS14, PE17]. **Optimizations** [iSYS12, WRFS15, BDL+19]. **optimize** [TVZ+15]. **Optimized** [Cha16, CF17, DRR16, HLLH16, LJB+16, MAIVAH14, Smi16, BD10, CNMC10a, FDWC12, KD17, KAS12, LWC14, LW16, LBP15, SEW12, SEW14, TVT+16, vSGB+18]. **Optimizing** [BPSS18, BCG+15, De 11, GBN17, KdMvO14, RKVL14]. **Optimum** [PCVZ11]. **OptQC** [LWC14, LW16]. **OPUCEM** [ÇÖSÜ11]. **ORACLE** [WS11b]. **ORB5** [MBB+19]. **orbifolder** [NRSVW12]. **orbifolds** [NRSVW12]. **Orbit** [BDBV12, CL14, CFF19, HSK+12, Nis11, PCGM14, RE12, WX14, WLGY18, XGH+19, MPS13]. **Orbit-based** [BDBV12]. **orbit-following** [HSK+12, XGH+19]. **orbital** [BHT19, CM15, CXH+15, Cor14, FGR14, HHS+10, KT12, KST14a, KAS12, MSS+16, PS14, PVK+18, QwWL+15, SGW17, SGSG19, SMGK19]. **orbital-based** [BHT19]. **orbital-free** [CXH+15, HHS+10, KT12, KST14a, MSS+16]. **orbitals** [BCC+18, Ert15, KTB17, KCA+15, KBSP19]. **orbits** [BRB12, BDT15, KRK16]. **orchestration** [CCdC+11]. **order** [AAD13, AAD14, ABdA15, AGH+16, AH13, ADdM12a, ADdM14, ACDdM15, ADdM15, ACDdM19, BBL+13, BKV16, BL19, BK16a, BCT17, BVC13, BIT12, CFMR10, Cap13, CZ18b, CD15, Cha16, CD12, CR12, DBMR18, DJ11, DZ13, DdMN16, EGT+18, FG13, Fu19b, GLPQ11, GGGH14, GJ14,

GA10, GPS+13, HSF+19, HZ11, KVV19, KMS14, KO14a, KBB+17, Koh15, Kol14, LX12, LV15, LWZ14, LST15, LLXK16, lLsSZ14, LW14b, LWJV18, MC16, MF17, Maź19, MD10b, MK19, MLK+17, MLK+19, MO14, NS15, NO12, PZZL19, PKT15, PVK+17, PM13, Qia10, RL10, RHW+12, Sch14b, SR12, SVV19, SSH+13, SS13b, SA15b, SC16b, SBPD19, SB11, Sok13, SS10b, THDS16, TY10, Tia11, VDF15, VL19, VEB+18, VV16, VV18, WWS10, WDR16, WC13, WP10b, WWR+16, WYSW10, WT15, XHLUF+18, XQ19]. **order** [XYK12, Zag14, ZD15, ZFH14, ZY19a, ZNT15, ZBN+19, vH10, DBLF16]. **ordering** [ZHSL13]. **Ordinary** [NO12, ADdM12a, ACDdM15, ADdM15, ACDdM19, FBHB17, MZE13, RBB15, WT15]. **ordinate** [ELDS14]. **organic** [HGCARM15]. **Organization** [SA15a]. **organized** [CGSB18]. **orientation** [SJY18, SJY20]. **orientational** [WDR16]. **Oriented** [CF16, FCC15, Asl14, BFD+11, BC19, CB15a, CB17, CB18, CDMCN11, CJ12, CXG+19, CFFR15, DM12, HHP+16, KMJS16, OKM12, SL16, WLG+13, WP10a, Zag14]. **Orthogonal** [Ser17, BDJS18, ST19, USOA13]. **orthogonalization** [BC10]. **ORTHOPOLY** [BDJS18]. **oscillating** [PAS11, PS14, SPTPR19, THDH14]. **oscillation** [BFM10, WW15]. **oscillations** [CCL15, Dan11, KHBS19, TW11]. **oscillator** [GKM10, GSMK17, GYW+10, MBGK11, MGK13, MAM14, PSL+17, SDM+12, SDS+17, SMGK14, SSK+13]. **oscillators** [Bla15, FMW10, Wu10, YWYF09, YZZ11]. **oscillatory** [AAD13, CYSL12, DJ11, FLW10, FGR14, LWYW11, LW14b, UNK12, WYSW10, WW10, YZWR14]. **other** [CS10, GH15, LP15, Rut18, SS18]. **outline** [BH14a]. **Output** [Car10a, Car10b, CMSV14, FCC15, GWM13, RJW+19, SAA+10, SZM+14, SMCB+15, Sta13, DDF+12]. **over-relaxation** [BSM13, BPP11]. **over-specified** [MD10b]. **overdamped** [LDW13]. **Overlap** [DPHB17, BBF+10, CL16, PB16, RVDS16, RDVS18]. **Overlapping** [KP12b, BHH+10, BBH+15, JU17, LTP+17, OOK+12]. **overset** [Cha19]. **OWL** [DT18]. **oxide** [BCP+16, NGCI+12, Sol11]. **oxygen** [NS11b].

P [DSM+11, SKB10, AM14b, CRA10, VHP+15]. **p-MEMPSODE** [VHP+15]. **p53** [HH11b]. **PACIAE** [SZY+12, SZY+13, YZCS18, ZYL+15]. **Package** [EFG+10, ADD+11, AKZ+13, ASPDL+16, AG14, ADdM+12b, ADdM14, AC15, AC18, Aza13, BBU11, BGM+14, BK13b, BB13a, BSGG10, BHH+10, BHW+12, BBH+15, CDdM14, CFSK14, CSK+19, CKK+13, CMS17, Dep17, Des16, DSS+12, DF11b, Eks11, FTI18, FRW17, FF11, FEH11, GLZ17, GLHR19, GST15, GdGB+18, GMO19, GLMG12, GJA+16, HBL+13, HEF12, HR11, HHP+14, HLZ+13, HM10, HM17, IIO16, Jac19, JGB+13, KPK+17, KST+14b, KPST15, LR18a, LR18b, LM16, LYJH19, LRR+15, LHGF18, LL15, LSK+14, MB12, MWCY14, MZE13, MNL19, Mül14c, Naz12, NS10, NS11a, NSXZ14, Nut14, ORI+10, Pat15, Pat17, PCEH15, Pre18, QZWU19, RRCSCJ10, Ros16, SFV19, SMOB19, SS12, SL17, SH18, SNG+11, Sem16, SM14, SQS+16, SLW19a, SLW19b, SSH16, Sit14a, Sit14b, Sit16, SAHP15, SLR16, SS18, SÜ18, TS10, UA17]. **package**

[Var16, VS19b, VJC12, WW14, WL11a, WCL14, WZHE18, Wie15, WZS+18, XNK+16, YE14a, YE14b, ZZ15, Zit11, vH10, BH14a, FGJB19, Pat15, Pat17, Sht17]. **Package-X** [Pat15, Pat17, Sht17]. **packages** [BKK13, BKM14, BK15, BK16b, Hol19, THJ+10]. **packet** [AV13, DHR14]. **packing** [CBAM12]. **Padé** [IH11, SB11, SAS11]. **page** [Gor19]. **pair** [CHA11, CM14b, DGST17, FCCTFR18, FPY+17, KHKR14, PH13, RK19, SLW19b]. **pair-instability** [CHA11]. **pair-potential** [FPY+17]. **Pairing** [WRB11, GLX+14]. **pairs** [HL19b, MWCY14]. **palladium** [SQL+10]. **Palmeras** [DLGP10]. **paper** [BLV+19]. **Para** [GX15, ZKG+18]. **Para-AMR** [GX15, ZKG+18]. **parabolic** [AAD13, BB10, GN14, HC16, HC17, NO14, OAKS11, PR13, RS12, TKZ18]. **Paradeisos** [JWM+18]. **paradigm** [CKhN11]. **Parallel** [APC+14, Bab14, BC11, CLH+17, CL15b, CRA10, EDPZ19, EKDGG15, FFT+14, FB19, GGI+13, GMF+17, GSMK17, GCH+18, HL19a, HvAS+13, HCSW10, JKIS16, KPPC13, LBM+14, LKL11, LT15, Mau16, NCHN15, NFD+19, NZQL14, PIH11, QLE16, RRCSCJ10, RNdB19, RD10, SD15, SO19, TSK+17, TSTT13, TMS19, US16, VHP+15, WC10, WYH19, YSLY19, YRR13, ZPH+15, ZHC16, ART17, AL17, BMC+11b, BS13a, BS14a, BPB+17, BHS18, BJCW13, Boe14, BCM+16, BVSG19, BHND16, BENK+17, CCLL18, CHNS18, CPR12, CUL+17, CSK+19, CDR+15, DBDP12, DN18, DJW+19, DSS+12, DRUE12, ER19, Fan19, FZ16, FZY17, FKS+19, GS15, Gai17, GP13, GWF+16, GS17b, GS17a, GD14, GB14, GZWJ18, GX15, GRLS18, HAV+14, HFOPF15, HMR+19, HZW+19, HPN18, HBH+17, HCHW11, ILZ+19, JEFP14, JL19, JHL+15, KVV19, KHBS19, KÓG17, KHZ+18, KD17, KBB+17]. **parallel** [LAA+10, LSG+12, LHH+12b, LHH+12a, LS12b, LHZ11, LWC14, LW16, MDW16, MIW+13, MM17, MCA17, MSI+10, MGB18, MGR16, NOR15, NFA+16, NPAG11, Ngu17, NM14, NFS15, OCF10, ORS+14, PDC14, PGO17, QL10, Qia17, RJLL16, RK19, RFSF18, RBB15, SL16, SSF+17, Sch18, SDS15, Sha13a, SOM+13, SC16b, SOJ14, Ste17, SMGK14, Str15, SPSP18, Sus17b, SSM+17, TTT16, VKP14, WMK11, WEH+19, WAHL13, WSH+12, WC15, WRVdL15, YHL11, YLQ+17, YL12, YBNY13, Zag14, ZAFAM16, ZSW+17b, ZMJ13, ZBN+19]. **parallel-adaptive** [GX15]. **Parallelisation** [MFH+13, Roh16, SCC+12]. **Parallelised** [FKH15]. **parallelism** [BS14a, BKS15, MDGC+12, TGH+16]. **parallelizable** [Smi14]. **Parallelization** [HBE10, MiH12, ASPW13, BW12a, CWY+17, DKG+14, DO14a, GLAC13, Giu19, JFC12, KEH12, KSY17, LKM+16, LW14a, ML17, OLG+16, PMS+15, RGH10, SCB+17a, SS18, THDS16, TE18]. **Parallelizeable** [SST11]. **parallelized** [GJB11, HHS+10, OKM12, TKL+12]. **Parallelizing** [TD11]. **Parameter** [DMP18, Mau16, dASJC+19, Ber16a, Ber16b, BHVMH15, BFM10, Che17, GCVA14b, JWC13, LAS+17, LHL11, Mel19, MKR+12, MD10b, PM13, PIH11, Yam16]. **parameter-free** [PIH11]. **parameterization** [AANAJ12, KHKR14]. **parameterized** [KL14]. **parameters** [ÇÖSÜ11, DBP19, HM12c, KKCC19, KPV16, MDPTTC17, MPS13, OO15b, PG10, RKVL14, SZM+14, WDR16]. **Parametric**

[Lin13, WXL13, BCMS10, GCVA14b, Zhe15]. **parametrization** [BNPPD19, LTP+17]. **parareal** [SCB+17a, SCB+19]. **paraxial** [PBL+18]. **PAREMD** [MGB18]. **parentage** [Dev12, SMGK19]. **Pariser** [KS12, SS10a]. **parity** [AB10, AKH12, SHZ13]. **parity-dependent** [SHZ13]. **Parker** [DSP15, LKW11]. **PARPLE** [Str15]. **parquet** [LKPH19]. **Parr** [KS12, SS10a]. **Parrinello** [VCMS+13]. **Parsek2D** [IBP+15]. **Parsek2D-MLMD** [IBP+15]. **Part** [ALS16, ABH+19, Dan10a, Dan10b]. **PArthENoPE** [CdSM+18]. **partial** [DHJ13, FBHB17, GCVA14b, HK15, Jiw15b, JK13, MJB+10, SGDS16]. **partially** [McM17]. **participating** [CAN11]. **ParticLE** [KDP+14, BOPL17, BJM15, BKPT12, CBAM12, CDR+15, DS11a, FHTO17, GLHG12, GRLS18, HPKF15, HZW+16, JBKM15, JFHA19, KS16a, KKK+17, LBM+14, MDPTK15, NHSY15, QL10, RNdB19, ÜS18, VGM+15, AM14a, ASPW13, AGMS15, ABCM14, AGB+15, ABRS12, BCH11, BPB+17, BBB+17a, BHNS17, BDL+19, BS15b, BE14, BTL+17, BCDP18, BDGG19, BY17, CH19, CATK11, CPW17, CC14, CC15, CSJ+17, CL11, CSSB15, CFF19, DCM+12, DET12, DGPW11, DF14, DBP+18, Dev12, DCVB+13, DCGG13, ENEO15, EKO16, ER19, EKK14, EW14b, Evs14, FLW17, FJ19, FN17, GWF+16, GKM10, GSMK17, GAHP15, GHMB+19, GD14, GZZ19, GH15, HBE10, HKJ+12, HAK+14, HCSW10, ILZ+19, JXTS16, KB15a, KRK16, KKG+15, KPA+19, KHK+11, KvdO11, KK17, KPPC13, LJE11, LS19, Liu11, Liu13, LOK+18, LQ18, LTP16, Mag18, MDPTTC17, MKL17]. **particle** [MKU+12, MF17, MST+18, MH18, Men11, MEM+11, MBGK11, MGK13, MAM14, MTO15, MNC15, Mül14c, NFD+19, NP19, NFS15, OBPL19, OCM+19, PR14, PMMF15, PG17, PBS+17, QLN14, RKVL14, RAV11, RK19, RH17, RTA10, SSS+11, Sch14a, SS14, SWL+15, Sie16, SN16, SM11, SBPD19, SSP16, SKK17, Sok13, SYE+18, SMCB+15, SMGK14, SBL16, TK14a, Tau10, Tic14, TdAdSS11, UW12, VSG18, VBMP15, VB19, VMFS16, WHG+19, WRFS15, WZS+11, WXW13, WXW14, WWC+16, WLQ+17, WN10, Wei12, WSH+14, WRR18, XQ19, XLX13, YZZ+17, YLQ+17, YK19, YLKN17, ZSW+17a, ZLFM11, dASJC+19, CDBM16, CHZ18, DS14, FJ19, IBP+15, KC18, LKA+16, PE17, PMMF15, iSSMI11, SVG10, SBE+16, VLL+17]. **Particle-based** [HPKF15, JFHA19, WSH+14]. **particle-beam-dynamics** [KPA+19]. **particle-cell** [PG17]. **particle-continuum** [SYE+18]. **Particle-field** [QL10]. **Particle-In-Cell** [HZW+16, BOPL17, DS11a, AM14a, BPB+17, BDL+19, CH19, CC14, CC15, DBP+18, KKG+15, KHK+11, LJE11, MKL17, MKU+12, MEM+11, MTO15, OBPL19, QL10, RKVL14, SSS+11, SKK17, Sok13, VMFS16, WWC+16, WN10, IBP+15, LKA+16, VLL+17, CDBM16, CHZ18, DS14, KC18, PMMF15, SVG10, SBE+16]. **particle-mesh** [BCH11, ILZ+19]. **particle-pair** [RK19]. **ParticleRecognition** [Nov17]. **Particles** [ATW+19, AFIS12, CHNS18, ES16, EBCB+14, EEGW12, GBJ+15, Gwi12, HL18, MDPTK15, MMT+11, MFLY19, PCGM14, RC18, SKK11, SMGK19,

TJH17, TD17, Ume18, Ume19, VC10, ZHCR18]. **particulate** [ZLFM11]. **partition** [HCH16, LKL11, Lee18, RMC16, ZMCT12]. **partitioned** [BY17, EPP12, FZ16, KZC+10, MKS10, WXL13]. **partitioning** [HJH17]. **partly** [KH12]. **Parton** [CGO17, BCH17, CUL+17, SZY+12, SZY+13, War16, ZYL+15, vH18]. **parton-interaction** [CUL+17]. **parton-level** [vH18]. **parts** [Fen12b, Kan14, SS13c, ZYL+19]. **passages** [JU17]. **passing** [TSTT13, XNK+16]. **past** [TKL+12]. **PASTA** [KBLJ18]. **Path** [NSXZ14, AGL11, Brá15, BGHN19, CMM14, LA13, MTS+16, MNV13, Miu11, RGKR17, WFM14, ZBG+16]. **path-integral** [ZBG+16]. **pathology** [LWES18]. **pathology-free** [LWES18]. **paths** [GA13]. **pathways** [MLGVE14]. **pattern** [CGSB18, FBG10, OG14, OO15a]. **patterns** [LSYZ12, MSPD12, WS11a]. **Pauli** [Bad11]. **PAW** [Hol19, RCGT16, SHW18, THJ+10]. **PBSA** [PSMS14, PSMS15]. **PCTDSE** [FZY17]. **Pd** [CHW+15, SWL+15]. **PDB** [DPK+15]. **PDB4DNA** [DPK+15]. **PDE** [BS15a, Fan19, RD10]. **PDE-constrained** [BS15a]. **PDEBellII** [MWCY14]. **PDEs** [CWJ19, GLHR19, KSW12, MCL+17, RHH12]. **PDF** [BCR14]. **PDG** [BBC+13a]. **PDoublePop** [TTT16]. **PDRF** [sX14]. **pe** [FBP+14]. **Peacemaker** [KSL+11]. **peakon** [HDZ14]. **pedestrian** [PC11]. **Peierls** [PE17, ZLZ19]. **PEM** [VS19a]. **penalisation** [SNB11]. **Penalized** [WvSL13]. **Penetrating** [WGG16]. **PENGEOM** [ASPDL+16]. **PenNuc** [GTPS19]. **Pentadiagonal** [TT14, GNP19]. **pentoxide** [LS11]. **peptides** [BBV+16]. **Percolation** [SW11, YHCS11, YH15]. **perfect** [JWM+18, DMH16]. **Perfectly** [LV15, SVV19, SKML11]. **perform** [PSMS14, PSMS15]. **Performance** [CMRVVR+14, CCY18, FBN+13, GHBL18, KKP11, KVW11, LSYZ12, PZL+19, Sha13a, Sin12b, TRM+12, Yi11, AL17, Ara14a, Ara14b, BBB+17a, BHNS17, BL18a, BCH17, BR13, BWPT11, BKPT12, BY13, CDS13a, CL15b, CRA10, Ein16a, FB19, GS15, Gai17, Gar19, GBK+12, HLZ+13, JTW+17, JVR12, KPA+19, KMS19, LSR+17, MWI+19, MMO+17, MVS15, ML16, DPHB17, NMS14, NFS15, PGO17, Rap11, RV10, SGM18, SHZ13, SSF+14, Tan19, TGH+16, VMGP+19, WGVPL17, WEH+19, XLCW14, YLL+19, dJBIM16]. **performant** [KSS18]. **perfusion** [BBB17b, IBB18]. **peridynamic** [CB15b, HS14a]. **periodic** [BRB12, BDT15, CWY+17, CZF18, DV11, EBCBG17, GBP13, HBP14, HBS+11, KFS17, KS12, KMJS16, KSY17, Law19, LRW+15, LF12, Mil16, PMS+15, Qia17, SXW+18, SS10b, TAFD19, VDB14, YW17, YLK10]. **periodical** [KAS12]. **periodicity** [PdMML19]. **peripheral** [KNS+17]. **Periphery** [ZCC19]. **Perl** [MGFRG12]. **permanent** [RMS+12, RE12]. **persistence** [KCL11, SBB+17]. **personal** [Cip11]. **personalized** [QHZ+14]. **perspective** [MTO15]. **pertaining** [OK14]. **Perturbation** [BK13b, ADT+19, BRH+16, CS10, CZ19, GBR+14, KBB+17, KPST15, LV10, MGRB11, Nis11, SCRS17, SÜ18, TVGB15, ZX10]. **perturbations** [LMRC15, Tic14]. **perturbative** [WL11b]. **perturbed**

[Bla15, FMW10, GN14, Wu10, YWYF09, YZZ11]. **petabyte** [Ano11o]. **Petaflop** [BBF+13]. **Petascale** [OYK+14, YBNY13, CBGY17, CBYG18, SKSK13, VCMS+13]. **petascaling** [SSS+11]. **PETOOL** [OAKS11]. **Petviashvili** [LS12a]. **Pfaffian** [GBRB11]. **Pfaffians** [RW11]. **PFMCal** [BDGM+17]. **PGAS** [BY17, TSTT13]. **Phase** [BM19, DVB11, JC16, KV10b, LLSK17, Ots11, Raw15, WJHW14, XHLM12, YLO13, AKR15, ABB+19, BT17b, BMW14, BS12, CZD15, CHW+15, CMR17, Evs14, FHA17, FKS+19, FFIH11, GTS14, GZW17, GLW14, GX15, Hon10, JHH+19, Ki10, KSW15, KS15, Liu15b, MRSD15, MKS10, MSHLS15, MSHL17, NS15, ÖKC11, PS14, QDZ+13, Raw16, SYD17, Sie16, SJW10, TKP15, VDF15, VS19a, Wai12, WYH19, XGH+19, YLK10, YZ19, ZAFAM16, ZKG+18, ZY19a, ZY19b, ZKS+18, vdSM16]. **Phase-Amplitude** [Raw15, Raw16]. **phase-covariant** [BS12]. **Phase-field** [LLSK17, CZD15, GZW17, JHH+19, TKP15, YLK10, ZKG+18, ZY19a, ZKS+18]. **Phase-fitted** [KV10b, PS14]. **phase-lag** [MKS10, NS15]. **phase-space** [KSW15, ÖKC11, XGH+19]. **Phasego** [Liu15a, Liu15b, LHWL16]. **phases** [BSWC14, EMW19, PS12]. **PHAST** [Fri17]. **phenomena** [KS15]. **phenomenological** [BNV18]. **phenomenology** [ACD+14b, ABH+18, BDDM18, BSW12, CFS13, LCE+13]. **PHI** [BFD+11, RJKC16, CGSB18, Lya15, MSS+14, SBE+16]. **Philip** [Sco19]. **phone** [Sal12]. **Phonon** [CP15b, Kon11, RE19, Sco13, BW16, CTT17, CCXC15, CGRB14, KA17, Liu15a, NGM+10, PMVG16, ZZSW19, ZZ17b, ZZ17b]. **phonons** [CVK+17, LCKM14, WCL14]. **PhonTS** [CP15b]. **photoelastic** [Wit14]. **Photoelectron** [MB16, Jab19]. **photoionization** [Hei12, HH11a, LH11]. **photon** [CMJ+11, DKT14, HEPW13, LLE+18, OK18, SMCB+15, Tic10, VDJ+11, ZLM12]. **photon-based** [CMJ+11]. **Photonic** [BDGM+17, HWCH11, HLW16, HLTW19, NJS17, PYW+14]. **photonic-crystal** [HWCH11]. **photons** [LN16]. **photorefractive** [Zió14]. **PHOTOS** [DPW16]. **photovoltaic** [CLH+17, RF15]. **phq** [ZZSW19]. **Phys** [AAT+20, Ano20, AZ17a, Ber16a, ERS10c, KYKN15a, Kra18a, LR16, Nat10, Ras17, RC16, RHBH15a, SGM11a, Sco13, SIMGCP14, SJY20, YQM14, ZTG14]. **Physalis** [Sie16]. **physical** [AABC+13, COK19, Che17, LCH11, MD11a, MDPTTC17, Mel19, RKVL14, Sit18, Smi14, ZF15]. **physicist** [Hah12]. **Physics** [AAA+16, Ano10a, Ano11b, Ano12a, Ano13a, Ano15a, Ano16a, BG19a, CXG+19, DS13c, Maź19, MLK+19, Ram10, ÜS18, Wu10, ADF+15, Ano10n, AM10, AM11, AMR19, BBB+18, BDKS10, BCP13, BC19, CB15a, CB17, CB18, CPW17, Che11, CKhN11, DGPW11, DNP+12, DPW16, Des16, DDK+15, ELL+17a, DRI+16, Hon18, JPCG15, JEC+12, KV10a, LPBH11, Mül14c, ONS+15, PBL+18, QGLP13, Sha13b, Sha16, SLR+11, Veb12, Wie15, YLKN17, ZWLZ17, ZMvE+13]. **Physics-oriented** [CXG+19]. **PI** [CMM14, KRM+19]. **PIC** [FK12, GV15, HTJ+16, KS16b, LYX+17, LTP16, SBL16, VV18, VGM+15, XYM+13, YXD+15]. **PIC/MC/Vlasov** [FK12]. **PIC/MCC** [SBL16]. **PICPANTHER** [KKG+15]. **Picture**

[BF16, BM13]. **PID** [OCF10]. **piecewise** [IH11, LV10]. **piecewise-linearized** [IH11]. **PIGLE** [ATW+19]. **PIMC** [ZBG+16]. **pinning** [HBS+11, JWC13]. **pipe** [Qia16]. **pipeline** [ECD+10, GCC+18]. **pipelines** [FWS+17, MSI+10]. **pipes** [DMC10]. **PISO** [SQA+15]. **PISO-like** [SQA+15]. **Pitaevskii** [ABB13, AD14, AD15, ABDR17, CR13, JCL+18, KYSV+15, LBB+16, LYSS+16, MGL13, MGL16, SSB+16, VDAH16, VVB+12, YSVM+16, YSMA+17]. **pitch** [HJ14]. **pitch-angle** [HJ14]. **Pitfalls** [SYE+18]. **Pj** [NDSH18]. **placement** [NZQL14]. **planar** [Aza13, BP12, BH13, MTE17, XD13]. **Planck** [BMBC+17, Fuh15, JSLM16, KBSP12, PG17, SLEF17]. **Plane** [MBF+10, AM14b, ACDdM14, DKSG16, GMF+17, HK15, JCW+13, JGAL+13, KAW+10, LT15, MED11, MS11, PDC14]. **Plane-wave** [MBF+10, LT15, MED11]. **planet** [HTT13, HTT14]. **planewave** [CSPAD10, PBMAD12]. **planning** [CLH+17]. **Plasma** [KC18, ZCC19, ALA+19, AAJA14, BMU11, BRL12, BT17b, BEKP19, CLW11, CGSB18, CXL19, CHH+11, DBP+18, Evs14, FRFH10, GBSY18, HKF+12, HO13, HBP14, Hon10, Hon18, Hsu11b, KYKN15a, KYKN15b, KTE+12, KMD12, KM17, KRB15, KSYY13, LOL+18, LDR+17, LHH+12b, LHH+12a, LJD+19, LDF+16, MPS13, MLGVE14, MKU+12, MCM+12, ML14, MN18, MMA15, MSM+11, NNWS15, OBPL19, PYW+14, PBD+15, PDJ10, Ram10, REtVH12, SCB+17a, SCB+19, SLR+11, SLEF17, SBE+16, THDH14, TL19, sX14, sX19, XYM+13, Yan09, ZFR18]. **Plasma-Material** [KC18]. **plasmas** [AM19, BSM13, BT17a, BDBV12, BB13b, CHH+11, CFF19, DS11b, DOP17, FR15, GB14, HKJ+12, HAK+14, KGG+16, LXR+18, LH11, LHB+19, LRK13, MF17, OILK17, PHT+19, PMS+17, PBL+18, RF16, RTT+18, SS14, SCM+16, VBC+12, VV18]. **plasmonic** [HT12, SVGS18]. **Plasmonics** [WTH15]. **plate** [TKL+12]. **platelet** [ZZG+16]. **platform** [AABC+13, AMR+18, CPW17, HTJ+16, LWJV18, RDP14, Sal12, SJY18, SJY20, ZZH+16]. **platforms** [LHZ11, PNL13, TKP15]. **PLATYPUS** [DT11b]. **Plesset** [KK14a, KBB+17]. **plot** [BGH+18, Liu15b]. **plugin** [SBB+17]. **PLUMED** [Gio14b, TBB+14]. **PLUMED-GUI** [Gio14b]. **plus** [SCM+18]. **PML** [DV11]. **PNADIS** [ZLZ19]. **POD** [HZC19]. **POINCARÉ** [MZE13]. **point** [Ano20, BMU11, BH13, BMZ+18, Buc19, CS10, CH11b, DG10b, DMC+15, KK16a, KCN18, MDGC+12, NFI17, Nik12b, PPY14, PDL+18, Pra11, SGM11a, SGM11b, TTG11, dSFdFF13]. **point-cloud** [KCN18]. **point-transition** [NFI17]. **point-wise** [PDL+18]. **points** [Fis12, GVR19, NO12]. **Poisson** [CM14a, RC16, BCDP18, Bot13, BC11, CDBM16, CCL18, CRLS18, CB16b, CHZ18, Dua10, DGG13, Exl17, GBN17, GJ13, HCSW10, JLW13, LCHM10, LCHM13, LCRL10, Miy15, Qia16, Qia17, RC13, VLPPM14, ZPvR16]. **polar** [CZL+11, WCL14]. **polarimetry** [FBHB17]. **polariton** [VBMS17]. **Polaritonic** [KAvdL11]. **polarization** [AKZ+13, CAGL13, Den10, MCP10, NLB+19]. **polarized** [AFIS12]. **pole** [ASEA14, AMRdA17, PDL+18]. **poles** [BG19b, SAS11]. **political** [Cho11].

pollution [MSML10]. **POLYANA** [DRR15]. **Polycrystalline** [KB15b, EBCBG17]. **polydisperse** [HKPF19, MFLY19, OL12]. **polyelectrolyte** [HB13]. **polygonal** [vdS13]. **polylogarithms** [ABRS19, BDV11, BD14]. **Polymer** [DF13, BL14, HCH16, LKL11, Lee18, MSZW11, MNC15, SAG13, WSTP15, dHGCS11]. **polymeric** [DEW16, SM19]. **polymers** [AMJ18, BJ11, GJB11, HP11, MJB11, RV10, VB11]. **Polynomial** [IUM13, KP12a, CB13b, CCK23, GDB10, GLX+14, HKZN17, Jal10, sL10, MCL+17, OCM+19, Pos19, UNK12]. **polynomials** [ACDdM15, BDJS18, GST17, SPS10, WISA11]. **polystyrene** [RV11]. **polyurethane** [KDM17]. **pool** [BKS15]. **Pople** [KS12, SS10a]. **population** [BWB+17, VPP+12, WRB11, YH15]. **population-based** [VPP+12]. **populations** [FSJ+16, HFOPF15]. **Pore** [DADS11, OP12]. **pore-scale** [OP12]. **porous** [CTL15, FKS+19, HZW+19, HSF+15, MPM14, OP12, RNdB19, SM14, vMB14]. **portable** [CDSG11, HTJ+16, RDC+18, RBG+19, SGM18, SS13a, VLL+17, dBCH14]. **porting** [HD11]. **posed** [LLP15]. **Positive** [Has11, XZF12, SMdONF14]. **Positivity** [SP18b, dTOV18]. **Positivity-preserving** [SP18b, dTOV18]. **positron** [GGGH14, Gre18, Kol15, SMOB19]. **POSMat** [MCY+16]. **possible** [ÁSTT16]. **post** [LAA+10]. **post-processing** [LAA+10]. **posteriori** [CLL16]. **Potential** [MCY+16, AM14b, BBF+10, BNAB11, DBDP12, DR12, FMRP16, FZY13, FPY+17, GC10, GC13, GC16, GC18, GCK19, GB11, HSF+19, JH15, JZZ+19, LCQF18, LWES18, LRR+17, MC16, MEG12, MAM14, ORCR17, PBMAD12, PH11, PB16, RS12, RFPM+17, SGDS16, TM14, WZHE18, WN19, Wit14, XNK+16, XD13, XHD15, ZHCR18, ZY19a, ZMPT13, ZFBR11]. **potentials** [BNV18, BL14, BY13, BSWC14, DT18, DHR14, Erm18, FCVH17, GH11, GD14, HLZ+13, KK14b, KHKR14, KHN19, LYJH19, Ngu17, OPO+11, OPSR13, OPR14, THDS16, TVZ+15, YW17, ZC12]. **POTHEA** [GCVA14b]. **POTLIB2Math** [TM14]. **Potts** [DG16, Boe14, FDWC12, KO13, KO14b, KO16, MEG12, NCHN15, TD11, XZF12, dSLF13]. **Power** [ZLL18, CC10a, CHC+11, EZBA16, SB11, SW12b, UW12, WWC+16, WCT11]. **power-law** [WCT11]. **PPA** [OK12, OK18]. **ppohDEM** [NMS14]. **Practical** [ABH+19, Dan12, EPS15]. **Prager** [GCH+18]. **PRAND** [BS14a]. **pre** [DdJC+19, RU13]. **pre-determined** [RU13]. **pre-exascale** [DdJC+19]. **precipitation** [XHLM12]. **Precise** [CKCS13, NKS15, ZY19b]. **precision** [AG12b, BDT15, CMRVVR+14, CMRVVR16, CBB+10, CH11b, GBFJ14, HS19, KB19, LGW13, LM16, MW19, MNOØ11, NO12, RCGT16, SLK19, SMGK14, TC12]. **Preconditioned** [EFK+19, HKZN17, LHJZ10, SAY+18, SPP19, TKS10, VBS+17]. **predict** [LOV10, Pra11]. **Predicting** [rJmYT11, WS11b, YS17, ZZH+16]. **prediction** [AFZ17, AFZ18, ATCZ19, BK13a, DBD+17, FLA+16, Liu14, LZ11a, LZ11b, LOSZ13, MW19, MW14, SLY18, WLZM12]. **predictions** [BBH+11a, DGPW11, KKK+15, Pit10, RH11, SAE+16]. **predictor**

[PAS11, PS14, SD10b, SA15b, TYH+15, Yua19]. **predictor-corrector** [PAS11, PS14, SD10b, SA15b, TYH+15]. **predictors** [ADdM17]. **Preface** [HS11, Hsu11a]. **preferences** [DMC+15]. **pregnancy** [ZBMM11]. **preparation** [Rut18]. **prescription** [Deu16]. **presence** [BT17b, DCC+10, JPK+12, Nis11, RS12, SD14]. **Present** [Pat12, GFJ+14, TIMM13]. **preservation** [MD11a]. **preserving** [BIT12, CWJ19, CM14a, CEF16, MF17, MN18, Miy15, Sal16, San15, SP18b, WXL13, WM13, YZ16, dTOV18, NO14]. **PRESHOWER** [HEPW13]. **Pressure** [HYM11, CHH+11, GAHP15, LHH+12a, Maź19, MLK+17, MLK+19, NKS15, SHW18]. **pressure-dependence** [Maź19, MLK+17, MLK+19]. **Pressure-induced** [HYM11]. **price** [KCL11]. **price-price** [KCL11]. **primal** [VvAV+11b]. **primal-dual** [VvAV+11b]. **primary** [MFLY19]. **primitive** [Ray10]. **principal** [MLGVE14, WLM14]. **Principals** [NFI17]. **principle** [CS17, Deg15, Evs14, HM18, SQL+10]. **principles** [CSL+13, EY11, ELL+17a, FWZ+12, GPS+13, JEC+12, LZL11, LS17a, PBMAD12, SWL11, ZZ17a, ZFZ19]. **PRO** [MGL16]. **Probabilistic** [Er14]. **probabilities** [DSHS17, PDC14, WW15]. **Probability** [PM13, SI11, AQJ10, Asc10, CMR17, Ker17, KCL11, KMS19]. **probe** [AAJA14, TCK+15, XLX+15]. **probes** [BMG+15, KKS18]. **ProbeZT** [KKS18]. **problem** [Ano20, BBB17b, BBC+13b, CLH+17, CDMCN11, CD12, Cho11, DPB16, Dua10, EKO16, GLX+14, IBB18, Ixa10, Jal10, KK16a, KPA13, KL11, LX12, LZP12, LWW10, MW12, MFM15, MK10, MD10b, PS11, RM10b, RC13, RC16, SCS12, TKJ19, WHB16, Wan10b, WP10b]. **problems** [AABC+13, AG12a, BCDP18, CCLL18, CAN11, CCHL11, CS10, DMP18, Des16, DCU+19, DB13, DS15, FGR14, GHvdL11, GMC18, GN14, GCHL15, HKSW10, Ixa16, Jan10, JWM+18, JOR+12, KV10a, KBSP12, KAS12, KL14, LMRC15, LV10, LHJZ10, LWL12, LHC+13, LCQF18, LW14b, LAG+17, LR13, LR16, MCWJ15, ÖY13, PS14, PS11, SKFP16, SS13b, SK14, SMCB+15, SS10b, TFBW14, TACA15, TVT+16, VSO+13, WFV14, ZHSL13, ZWLZ17, ZX10, ZLL13, ZNT15, vRWS14, vWB10]. **procedure** [AKS17, BW16, BSWC14, CCLL18, KMD12, KM17, KSW12, RC18, TIMM13]. **procedures** [Dua10, FG13]. **Procesi** [HDZ14]. **Process** [BKS15, CLF18, DKT14, LTL+12, LCRL10, MLEM19, dHGCS11]. **processes** [BdVGS11, COK19, CZGC19, CPHL14, CF17, CRC+13, CI11, Fri19, GTPWL12, MKB+11, OK12, OK18, RCD+10, Ros15, SOYHDD19, TC11b]. **Processing** [Boe18, Dem11, Mau16, MSML10, YLO13, Ano19m, BK11a, BHS18, BJCW13, CDS13a, CMSN18, CSSB15, Col14, DBDP12, DS11a, DF13, FSH13, FUSH14, FCVH17, FVH18, Fil14, Fri14b, FWS+17, FZY13, HAN+16, LAA+10, LAS+17, MED11, MEM+11, NPAG11, PVH+17, PLD+13, RFSF18, SPTPR19, SLW19b, SH12b, SSM+17, TD11, Tic10, WDL11, WWFT11, Zlo13]. **processor** [APRG11, NBN+14, Rap11, TB14]. **processor-based** [TB14]. **processors** [LSG+12, RJKC16]. **produced** [AG14]. **Product** [JWC18, CCK23, DBK+14, Eks11, GDB10, HR11, Tos10]. **production**

[BBUY13, BKMP16, BG14b, CWW10, CWW15, Cip13, DDKM15, GLPQ11, Gin10, HLM13, KMO19, KKK+15, Les16, OK12, OK18, WW13, YWW13]. **PROFESS** [CXH+15, HHS+10, KST14a]. **profile** [ABB+19, Gio14a, VSG17]. **profiles** [AANAJ12, MSNI11, Wai12]. **profiling** [CCY18]. **Program** [BS11, BS13a, BB13a, CGV13, DHR14, GBS16b, LSDD14, NS10, VPM16, AC13, AM10, AM11, Arb12, AMR19, Asi10, AZ17a, AZ17b, AKV18, BGM+14, BF16, BBPS14, BH14b, BFD+11, Bog16, CKLM10, CDTV10, CH11a, CATK11, CXH+15, Cip11, Cip13, CCGC13, CRNK12, CM14b, CO11, Dan11, Dat13, DEMM19, DDKM15, Dev12, DKG+14, EJG+19, FMRP16, Fer15, FCCTFR18, FEH11, Fri12, Fro11, Gao13a, GLS+13, GCVA14a, GCVA14b, GNT17, HSF+19, HLM13, HEF12, HHS+10, HL19c, JPSS10, Jia18, KKSY18, KNS+17, Kob13, Kol14, KS12, Kra11, LHC+12, LZL11, MCV18, MUU18, MCA17, MPS13, MLW+10, ME18, MNV13, MGB18, MBGK11, MSNI11, NGG+13, NGM+10, ÓN14, OKM12, dlRJL14, PCR17, PSL+17, Pit12, Pos18, RDP14, RFPM+17, SZY+12, Sai10, Sar17b, SSG+10, SSG+18, SBB13, SDM+12, SDS+17]. **program** [STY15, STY18, SZM+14, SS10a, SLLP17, SSK+13, TVZ+15, TS11, UW12, Ver16, XMLC16, YKK+19, YLTS16, ZF16, ZBG+16, ZKW+15, ZYZ15, ZSW+17a, ZMCT12, ZZD15, ZZ17b, ZHL11, Zlo13, ZUT13, dB14]. **programmable** [Rap11]. **programme** [KB19, LTP+17]. **programming** [BY17, EGT+18, GRTZ10, JTW+17, LSYZ12, SV14, iSYS12, TSTT13, VvAV+11b, VvAV+11a, WMK11, YHL11]. **Programs** [HL19b, ABB+14, Ano10o, AC16, Bjö11, CL15b, HD11, JCL10, JZZ+19, KO14b, Kom15c, KO16, KPST15, KYSV+15, KLM+19, LCJ10, LBB+16, LYSS+16, SSB+16, VVB+12, YSVM+16, YSMA+17]. **ProIO** [BABC19]. **Project** [GTK+19a, BBC+13b, DBK+14, GAC+17, LKPH19, LSJ13]. **projected** [BK12, Jan10, PR10, SKB10]. **Projecting** [BHS15, DHS14]. **Projection** [DAW+19, WX14, GHvdL11, Sal16]. **Projective** [CH19, LL12]. **projector** [CKT17, DA16, Hol19, THJ+10, YLO13, JTH14, RCGT16]. **prolate** [ALSW14, Kir10]. **ProMC** [CMSV14]. **proof** [BRB12, Deg15, SS18]. **proof-of-principle** [Deg15]. **propagating** [GTS14, MC10, Raw15]. **Propagation** [ACML11, APRG11, BF16, BRL12, BPMM14, BG14b, DKSG16, EKDGG15, GB14, HEPW13, HKvH16, HHM+15, IB11, JCL10, KFS+13, LR13, LR16, MiH12, MA11, OAKS11, PQTGS17, TMD11, TKZ18, VDJ+11, Wal11, WGG16, Zió14]. **propagator** [DSS+19, MNV13]. **propagators** [EPS15, GM16]. **propelled** [AD11]. **Proper** [HJH17, ST19]. **properties** [AM14b, BKA+14, BIT12, CLC14, CHW+15, CSL+13, DSS+12, DES+11, EY11, Fri12, GWL+17, GM11, GRR+14, HCRD14, KAR+15, KMM+19, KAvdL11, KZ14, LFKD18, LSDD14, LSG+12, MLW+10, MF17, MFS10b, MGB18, PVK+14a, PVK+14b, PMVG16, PGMU19, RKGC+17, SPAW17, Ste17, TG11, Voy13, WXL13, WQ18, WWL11, ZZSW19, ZMJ13]. **property** [FLW10, ZZ17a]. **proportional** [KB15a]. **Proposal** [BBC+13a, Yam16, Ano10o, DSS+19, KFS+13]. **prostate** [RMS+12]. **Protein** [Fri17, CB16b, LWL11, SZC+13, YK10, DPK+15]. **Protein-like**

[Fri17]. **protein-surface** [CB16b]. **proteins** [BHH+10, BHW+12, BBH+15, CS16, CZN14]. **protobuf** [BABC19]. **ProtoMD** [SMO16b]. **proton** [BS13b, Gin10, KMO19, MSNI11]. **proton-proton** [BS13b, Gin10]. **prototyping** [SMO16b]. **providing** [Kaw19]. **Ps** [KH11]. **Pseudo** [Dem11, BCJW13, KZC+10, LV15, MDHD18, SNB11, SVV19, TD14, UO15b]. **Pseudo-random** [Dem11, BCJW13]. **pseudo-spectral** [KZC+10, LV15, SNB11, SVV19, TD14]. **PseudoDojo** [vSGB+18]. **pseudopotential** [DSLP11, GVPJ18, JCW+13, vSGB+18]. **pseudopotentials** [BPS+16, HBP+15, SG15, VFV19]. **Pseudorandom** [HLD13, ÖY13]. **pseudospectral** [DT11a, HKvH16, TC11b, YZ16]. **PSML** [GVPJ18]. **PSsolver** [ADdM12a]. **PSTD** [GV15]. **Pt** [SWL+15]. **PTD** [BD12]. **PTX** [iSYS12]. **public** [SAE+16]. **PUFoam** [KDM17]. **Pullback** [MBB+19]. **pulse** [APRG11, CCXC15, GCF+17, IB11, KME+11, SPS10, TKZ18, WP10b]. **pulsed** [CHC+11, GC12, LJSW11]. **PULSEDYN** [KS19]. **pulses** [BEKP19]. **PumpKin** [MLGVE14]. **PUQ** [HHM+15]. **pure** [CB13a, JCL+18, KAR+15, NS11b]. **purpose** [ASPDL+16, AABC+13, DBP+18, Fer15, GJ14, GNA+15, LPC+15, MSI+10, RFPM+17, iSSMI11, SS10a, TdAdSS11]. **Pushing** [CSV+18]. **PWBA** [BPC12, Cip11]. **PyCDT** [BMZ+18]. **pyCTQW** [IW15]. **PyDII** [DMC+15]. **PyFR** [WFV14]. **PyGBe** [CB16b]. **pyGDM** [Wie18]. **pyIAST** [SSH16]. **pyJac** [NCS17]. **PyR** [LSSW14, LS17b]. **pyramidal** [ZHC16]. **pyrochlore** [IUM13]. **pyrolysis** [XAPK14]. **PySCF** [KBSP19]. **PySCF-NAO** [KBSP19]. **pySecDec** [BHJ+18, BHJ+19]. **PYTHIA** [KRW13, SAC+15, EGPS10]. **Pythia8** [AAB+10b, War16]. **Python** [BMZ+18, CMM14, CFSK14, CFW17, CSRV13, CKK+13, CBB14, Cri18, DEMM19, DMC+15, GH18, GHN19, GdGB+18, HHP+16, JNN12, JNN13, KPK+17, KSH14, KBLJ18, LS17b, ML16, QZWU19, RKVL14, SV14, SSH16, Sta19, Var16, Wie18]. **PyVCI** [SC16a].

Q [SKB10, Wan10b]. **Q2DTor** [FCCTFR18]. **QBH** [Gin10]. **QCD** [AC15, AC16, AC18, BLPP13, BBUY13, BK13b, BCS10, BWWM19, BBC+11, BCDI12, BS13b, Bot11, CB13a, CDS+13b, CBB+10, FKL13, GM18, HKK11, JPSS10, KP12a, Kan18, LCL+11, LS13, MWL+10, NIK+12a, NS10, STK10, SV13, TKS10, WL11a, War16]. **QCDLoop** [CEZ16]. **QCDMAPT** [NS10, NS11a]. **QCDMAPT_F** [NS11a]. **QCDNUM** [Bot11]. **Qcompiler** [CW13]. **QCWAVE** [TJD11, Tab16]. **QDENSITY** [Tab16]. **QDENSITY/QCWAVE** [Tab16]. **QED** [BCR14]. **QEDMOD** [STY15, STY18]. **QEDv2** [SV14, Vuk12]. **QEngine** [SJHS19]. **qha** [QZWU19]. **QIST** [HWM+15]. **QLM** [Kri12]. **QM** [MMSF+15]. **QM/MM** [MMSF+15]. **QmeQ** [KPK+17]. **QMMMW** [MMSF+15]. **Qprop** [MB16]. **QQbar_threshold** [BKMP16]. **QRAP** [SKB10]. **QSATS** [Hin11]. **QSWalk** [FRW17]. **QSWalk.jl** [GMO19]. **Quadratization** [XYZX19]. **Quadrature**

[SPSP18, AG12b, AAT17, BK12, HKPF19, JPM12, Jiw15b, MSR10, MN10, PFFK19, PTS12, Sch14b, Shi16, PSP16]. **quadrature-based** [BK12, HKPF19, PFFK19]. **quadratures** [PPY14]. **quadric** [ASPDL+16, DSPJ10, GSB+14]. **quadrilateral** [LWRQ16]. **quadrupole** [TUY15]. **quadrupoles** [SBPD19]. **quadtree** [TE18, TK19]. **quadtree/octree** [TE18, TK19]. **quality** [SZC+13]. **quantification** [CNS+14, KZ14, OO15b, OO15a]. **quantitative** [BHH+10, BBH+15, CSC11, LN16, SSM+17]. **quantities** [KFF+16, LCH11, WHG+19]. **quantity** [CLH+17]. **quantization** [Zit11]. **Quantum** [BDK11, BG11, CW13, DSW15b, DS13b, FGGM11, GRTZ10, KYM+17, LCH11, LW13, ON11, PNL13, TTS11, UKKB19, ZZD15, ACTP15, AK13b, Aza13, BBW11, BMW14, BBC+13b, BMNS14, BAF18, BVSG19, BS12, CZ17, CZ18a, CL10, CK12, CB16a, Dat13, DJW+19, Den10, DHR14, DDM14, EY11, FRW17, FUSH14, FVH18, FE11, FLW17, Fri14b, GWL+17, GZL14, GMO19, GM16, GH15, GWF+11, HWG13, Hin11, HRC11, Hoh14a, HWM+15, Hua17, HL19c, Ihn12, ID18, IIO16, IW15, JWC18, JNN12, JNN13, JMG+17, JDG12, KSL+11, KPK+17, KPOR18, Kro16, LKM+16, LV13, LW11, LWC14, LW16, Lut15, LJB+16, Men11, MNW+17, Mis12, Mis13, MKV11, MBFD12, NEW+18, Nog17a, Nog17b, NVW+13, OBH10, ORCR17, dlRJL14, PFA+15, PBS+17, PKRS16, RF10, RK11, RPL+14, RC11, Sai13, SV14]. **quantum** [San15, SGAA18, SL17, SH18, SZ15, SKFP16, SPMM11, SOM+13, SGW17, SO19, SH16, SZM+14, SJHS19, Sou14, SCG11, SKSK13, SÜ18, TJD11, Tab16, TTG11, TMS19, Vuk12, WFM14, Wan10b, WC10, WM13, WPAV14, YÇÖ15, YWOD19, ZHC16, VFV19, vWB10, BKC+17, GSZ13, KST14a, MMSF+15, RF10, YKS11]. **quantum-corrected** [SO19]. **quantum-mechanical** [LV13, RC11]. **quantum-transport** [EY11]. **QuantumOptics.jl** [KPOR18]. **Quark** [BBB+15, ARAB+17, ACD+14a, BG14b, CCN17, Gao13a, GBJ+19, HLM13, KKK+15, SS12]. **quarkonium** [Sha13b, Sha16, WW14]. **quarks** [ALL+11, BKMP16, KP12a]. **quartic** [KVW11]. **Quasi** [JLA+14, BCT17, BHJ+19, CJH11, CHC+11, GZW17, HDZ14, KFS17, LKA+16, LB13, NJS17, dlRL11, PE15, VB19]. **quasi-bound** [LB13]. **quasi-cylindrical** [LKA+16]. **quasi-Degasperis** [HDZ14]. **quasi-harmonic** [dlRL11]. **quasi-incompressible** [GZW17]. **quasi-Magnus** [BCT17]. **Quasi-Monte** [JLA+14, BHJ+19]. **quasi-neutral** [PE15]. **quasi-one-dimensional** [CJH11]. **quasi-pulsed** [CHC+11]. **quasicrystalline** [HCC14]. **quasiharmonic** [dlRAPL11, QZWU19]. **quasilinear** [BB13b]. **quasilinearization** [Jiw12, KV10a]. **quasiparticle** [DSS+12, KMM+19, KOK17, ZZSW19]. **quasiparticles** [CTT17]. **quaternion** [JZJ18, San15, WM13]. **quaternionic** [JZJ18, LWW10, San15, Wan10b, WM13]. **qubit** [RF10]. **qubits** [LW11]. **QUCON** [vWB10]. **qudits** [LW11]. **questioning** [QHC+10]. **Quick** [TW15]. **quiet** [LSK+13, SKH+10]. **Quintic** [LX12, WZ13]. **quotient** [KSW12]. **QuTiP** [JNN12, JNN13]. **qwViz** [BBW11].

R [LQZ+13, ADH+17, GH18, GHN19, LQZ+13, MiH12]. **R-matrix** [MiH12]. **r10** [AFZ17]. **r11** [AFZ18]. **r12** [ATCZ19]. **r7** [LZ11b]. **r9** [FLA+16]. **RA** [SKB10]. **raaSAFT** [ESM17]. **Radar** [WGG16]. **radial** [DG10b, DM17, DRR15, Kir10, LXR+18, MRL18, MK10, PAS11, SFV19, SD10b, SFV19]. **radially** [KSW12]. **Radiation** [OK18, ASPDL+16, ASS13, Aza13, BSC+13, CAN11, GLAC13, HJL+14, KEH12, LHJ+15, LAG+17, LS17a, PCEH15, QA13b, RDC+18, RB18, SL16, SCJH19, SC15, SC16b, VMFS16, YXT+15, Hak16, Hak19]. **radiation-hydrodynamics** [SC15]. **radiation-induced** [LS17a]. **radiative** [AFIS12, CZF18, ELDS14, HTT13, HTT14, XHLUF+18]. **radical** [Faw10]. **radii** [GR19]. **radio** [ECD+10, GB14, KMD12, KM17, KSY17, SVG10, TRM+12, TUY15]. **radio-frequency** [GB14, KMD12, KM17, SVG10]. **radio-map** [TRM+12]. **radioactive** [SM14]. **radiobiological** [KEH12]. **radiography** [BL18b, WHB16]. **radioisotope** [WT12]. **radionuclides** [GTPS19]. **radiowave** [OAKS11]. **radius** [KB15a, SH12a, XGH+19]. **raft** [MD11b]. **Raman** [CLY11]. **ramp** [Hon10]. **ramp-up** [Hon10]. **Random** [DVB11, NHD16, RNdB19, AM14a, ASPW13, BS11, BS13a, BS14a, BJCW13, BCJW13, BPSS18, CSRV13, Dem11, FLP10, GP13, GAHP15, GBS16b, Hal17, KC14, KS16b, KMS19, KD16, LS15a, LSG+12, MKMK10, MH11, Mis12, Mis13, PPS10, Rom15, Sav15, SS13a, Sib17, SW11, TC11a, UO15b, WRVdL15, XZF12, YZZ+17, YLO13]. **random-bond** [XZF12]. **random-field** [SW11]. **randomly** [SKML11]. **RandSpg** [AZ17a, AZ17b]. **range** [ADD+11, BTM+17, Boe14, BWPT11, BSWC14, Cor14, Fil13, Fil14, FN17, HWL+17, HM17, KK16b, KMD12, PG10, iT11]. **ranging** [SGSG19]. **rank** [Ara14a, Ara14b, BK12, DSHS17, KK14b, LO14]. **rank-structured** [KK14b]. **Rapid** [FWS+17, MJB+10, Ray10, SKH+10, HvAS+13, Ruf13]. **RapidSim** [CCN17]. **Rare** [KBT+14, CGV13, KI11]. **rarefied** [HZW+19, JvOK17, PG17]. **Rashba** [XJS16]. **ratchet** [HCT11]. **rate** [CGRB14, GJLB12, Shi16, SAN18, XHLUF+18, ZBMM11, WS11b]. **rates** [ADF+15, AAT17, GGGH14, SAG13]. **ratio** [RE19]. **rational** [ACDdM15, ADdM15, ACDdM19, Tia11, TK14b]. **Ratip** [Fri12]. **Ray** [MTM14, OTC14, BMF+19, BHN+16, CCM12, DA16, FWS+17, GTL+17, HCM19, KMA+12, LHC+12, LP15, LL15, MMC10, MCAdF14, MM11, Mül14a, Tic10, TVGB15, TS10, VDJ+11, WG16a, WFDK19, YvOSM15, Bru13, CDSG11, Cip13, GSB+14, LS12b, MD11b, PBMAD12, Tic10]. **Ray-tracer** [OTC14]. **Ray-tracing** [MTM14, LHC+12]. **Rayleigh** [WG12]. **rays** [LKW11]. **RBF** [DM17]. **RCCPAC** [MCA17]. **RCM** [ZHSL13]. **RCS** [MSR+17]. **re** [CLJ12, TU14]. **re-formulation** [CLJ12]. **Reaching** [RCGT16]. **reactant** [ECSH16]. **reacting** [LL12]. **Reaction** [GAGW16, VRV15, VRV18, BO12, DMP18, DT11b, JuIAM16, LRSS19, MFM15, Shi16, SCM14, SAG13, TRN16, VMFS16, XWF18, dSF18, TDL+14]. **reaction-diffusion** [MFM15, SCM14, XWF18]. **reactions** [GC13, GBJ+12, GBJ+13, Pla16]. **Reactive** [WFM14, AV13, ASEA14,

CFFR15, HL19c, MLR10, iNSK+15, PNL13, WMI19]. **reactor** [TGH+16, ZSW+17b]. **reader** [CGO17, Sta19]. **Real** [Ano19m, AAB+10b, BD10, CDL+12, LAS+17, MSH11, SP16, SBH+12, AAA+16, BW12b, BR14, BG11, CDMCN11, ECD+10, FZ16, JL19, KK16b, KHZ+18, KKL+18, KS16b, MC16, MBF+10, MSS+16, OOK+12, dlRJL14, PVK+18, SCRS17, TL17]. **Real-space** [MSH11, SP16, SBH+12, BG11, FZ16, KKL+18, MBF+10, MSS+16, OOK+12, dlRJL14]. **Real-time** [Ano19m, BD10, CDL+12, LAS+17, AAA+16, BR14, JL19, PVK+18, TL17]. **Realistic** [Sol11]. **reality** [GHK19]. **realization** [BS11, GBS16b]. **realizations** [ÁSTT16]. **realized** [NPAG11, RH11]. **rearrangement** [Bin13, UFKB19]. **Receiver** [SC14]. **receptors** [PDC14]. **reciprocity** [DG10a]. **recognition** [DAW+19, UIY11]. **recoil** [DIR+19]. **RECOLA2** [DLU18]. **recombination** [Fri12, SVG10]. **recommendation** [QHZ+14]. **reconfigurable** [RDN+17]. **reconfiguration** [KC14]. **reconnection** [PBE14, YJK11]. **reconnections** [CZ17]. **reconstructing** [PR10]. **Reconstruction** [MD11b, ALC18, CPCDdM18, FBHB17, GMH11, HZC19, LSK+13, LAS+17, SAS11, VL19, WFV14, YvOSM15]. **record** [BS14b]. **recording** [MP11]. **recoupling** [Wei99]. **rectangular** [JYPA18, Qia16, SK15]. **recurrence** [BBF+10, TO10a, WSO+12]. **Recursive** [PO14, Fen12b, KvdO11, ADH+17, DLU18]. **recycling** [CMRVVR16, YRR13]. **Red** [BGL+14, BTL+17]. **reduced** [CZ18b, KKCC19, Kom15b]. **reduced-order** [CZ18b]. **Reducing** [BH17, BHVMH15, CMSN18, GM17]. **REduction** [BKM14, ASGLK10, BCS10, BKK13, BK15, BK16b, Che17, EPS15, GSB+14, MUU18, Mel19, MZE13, MNC15, PZL+19, Per14, SH18, Stu10, ZWC+19, BKK13, BK15, BK16b, Smi15]. **Redundant** [QHZ+14]. **Reduze** [Stu10]. **reference** [DKG+14, DFM+15, Duf16, JP10, KKO19, SS11b, VS19a]. **reference-free** [DFM+15, Duf16]. **refined** [EZL+16]. **refinement** [ACMM19, AWK+16, FXZ+14, GX15, JFC12, LH18, LWRQ16, MHV17, UBRT10, WQ18, YRR13, ZD15]. **reflection** [GCVA14a, Ram10, WS11a, Yan09]. **reflections** [NLSJ17]. **Reformulation** [LZP12]. **refractory** [SCNJ18]. **regarding** [MS15]. **Regge** [ASEA14]. **regime** [CXL19, REtVH12, TKL+12, YWOD19, dSFdFF13, vMB14]. **Region** [OK10, HJGL18, HJGL19, SZM+14]. **Region-of-interest** [OK10]. **regional** [BB12]. **regions** [Smi14]. **regression** [AG12a]. **regular** [MKV11, NO12, Sch18, SSG+10, SSG+18]. **Regularization** [Pál12, dDYK+18, Fen12b, Kri12]. **regularizations** [DDH17]. **regularized** [DS11b, PDL+18]. **regulatory** [HH11b]. **reinitialization** [FHA17]. **rejection** [SOYHDD19]. **related** [KAS12, MHA+12, PAS11, PS14, SCW+11]. **relation** [WSO+12, sX14]. **relations** [SS13c]. **relative** [Bar11b, BSWC14, FS17]. **Relativistic** [FGJB19, GLB13, Hsu11b, Mül14a, TM19, Aza13, Bab14, BHS18, BEKP19, CGM17, CEF16, EJG+19, Erm18, Fri12, GM11, GTS14, GBJ+10, GBJ+12, GBJ+13, GFJ+14, GBJ+15, GYW+10, HH11a, JGB+13, KB19, KHB14,

KKG+15, KNS+17, KPST15, KMA+12, LWES18, MDHD18, MCA17, MF17, NGG+13, NPVR14, QYM11, QA13a, SZY+12, Sar17a, SQS+16, SS11a, SLEF17, XQ19, XYM+13, ZD15, dlRM18]. **relativity** [MG10a, Mül11a, Bre10, GLMG12]. **Relaxation** [CYN19, BSM13, BPP11, BPMS16, Eba13, FN17, KS15, MKB+11, SW12b, XHLUF+18]. **release** [GRR+14, RKGC+17]. **relevant** [LPBH11, MPS13]. **Reliability** [CZ18a, MH18, WLH+12]. **reliable** [AMM11, BS14a, CO11]. **reliably** [SZC+13]. **Relic** [AM11, AMR19, AM10, AM10]. **reloaded** [CdSM+18]. **remainder** [CB13b]. **remapping** [KN13, LJWK11, LJZ+18]. **remarks** [MS15]. **Removal** [BCH11, DF14]. **renormalisation** [Fon12, Roh16]. **Renormalization** [LSSW14, FSC13, HB12, KK16b, MK19, NBN+14, PO14, RGH10, Sta11, Trö11, Ver16, WPAV14, LSR+17]. **renormalized** [FHH+14, GZL14]. **reorthogonalization** [JK13]. **repeated** [OK14]. **replacement** [YZCS18]. **replica** [Boe18, GXF+15, GJB11, IIO16, IFOI18, JJ15, LRC+11, LK15, UO15b, UO15a, HL19a]. **replica-exchange** [Boe18, GJB11, IIO16, IFOI18, UO15b, UO15a]. **Reply** [MLK+19]. **representation** [BDBV12, CYOS19, FK15, KCT15, Kaw19, LS19, LWL12, MLW+10, Naz12, PDL+18, PCGM14, WISA11, WZHE18, WvSL13]. **representations** [HR11, LDD+19, LLX14b, LJB+16, ÖKC11, SL17]. **representing** [McM17]. **reproduce** [BW16]. **Reproducibility** [WEH+19]. **Reproducing** [LLX14b]. **repulsion** [PB13, TO10b]. **requiring** [Fer15]. **rescaling** [Odr11]. **research** [GBS+16a, LHC+12, LYJY10, PFA+15, PYW+14]. **reservoir** [YSLY19, ZAFAM16]. **Reshetikhin** [JWJL12]. **residual** [YK18]. **residues** [LR18a, LR18b]. **resilient** [MCL+17]. **resistance** [ZLZ19]. **resistive** [Ein16b, FDZ17]. **reskit** [BG19b]. **Resolution** [AS16, ABRS12, BMG+15, CBGY17, JP10, JAS17, PHA18, Sit18, SCM+18, TRM+12, XHLUF+18, YK19, dB14]. **reSolve** [CC19]. **resolved** [Sie16, WQ18]. **resolved-particle** [Sie16]. **Resonance** [KH11, VCMS+13, ASEA14, GH11]. **resonances** [BNV18, LTP+17, SAS11]. **Resonant** [BP12, BT17b, Dem13, JTT11, JGC+11, WFDK19, YSN+14]. **resonator** [HWCH11]. **resonators** [Bal19, WX11]. **resources** [CCdC+11]. **respect** [GCVA14b]. **respiratory** [CPCDdM18]. **response** [KBSP19, LLMW17, MDF11, VBS+17, ZHCR18]. **responsible** [JHJG14]. **REST2** [JJ15]. **restart** [SMUT19]. **Restoration** [JTP15]. **restoring** [GGG+19]. **restraints** [CRNK12]. **restricted** [TC11a]. **results** [CF16, KMO19, Sha18]. **resummation** [AHH+19, CC19]. **retarded** [GBJ+19]. **retrieval** [SSP16]. **reveals** [BVC13]. **Reverse** [OPO+11, OPSR13, OPR14, SGNL17, TKP12]. **Reversibility** [Urb18]. **reversible** [FW11, HCT11]. **Review** [RL10]. **Revised** [MGK13]. **Revision** [CC12, ZHPS10, Sib17]. **revisited** [BR11, DIP11, Jab15, LV10, XD13]. **reweighting** [BMHP17, LS13, Sin11, Sin12a]. **Reynolds** [SCM+18]. **rezoning** [LJWK11, LJZ+18]. **RF** [DFM+15, Duf16, AM19, AAJA14]. **RF-MEAM** [DFM+15, Duf16]. **RG** [NDSH18]. **RGEs** [LS17b]. **RGIsearch**

[Ver16]. **RHEED** [Dan10a, Dan10b, Dan11, Dan14, Dan16, Dan17, Dan19]. **rheometer** [SPTPR19]. **rhoCentralRfFoam** [MTE17]. **rhombohedral** [WWL11]. **ribbed** [JU17]. **ribosome** [MTSI11]. **Riccati** [IH11, LD10b]. **Richards** [BALV16, ORS+14]. **RichardsFoam** [Org15]. **RichardsFoam2** [Org15]. **Richardson** [SPP19]. **Riemann** [FJK+17, QSB19, TKJ19]. **Riesz** [MDHD18]. **right** [REBS16, STK10, TKS10]. **right-hand** [STK10, TKS10]. **Rigid** [NPAG11, ER19, Faw10, MNV13, SA14, Van15]. **rigid-molecular** [SA14]. **Rigorous** [FNPMB10, BDT15, CZL+11, NM14]. **ring** [SAG13, WJHW14]. **rings** [Pos19, Pos19]. **ris** [NGG+13, EJG+19]. **Rivet** [BBG+13]. **RKN** [Wu10, Bla15, FLW10, FMW10, LWYW11, MHWH19, YWYF09]. **RKN-type** [Wu10, FMW10, YWYF09]. **RLW** [MC12]. **RMHD** [Mar15]. **RNGAVXLIB** [GBS16b]. **RNGSSELIB** [BS11, BS13a]. **Robin** [RTA10, SN16]. **Robust** [CS17, GN14, ACdS13, CPV13, Den10, KV19, TZM17, dlRL11]. **Roe** [TCP13]. **role** [BNAB11, GAHP15, Has11, HH11b, PDJ10]. **rolled** [NJS17]. **rolled-up** [NJS17]. **rolling** [NDSH18]. **roof** [RLL12]. **roofline** [KKP11]. **ROOT** [Ano11o, Car10a, Car10b, SS18, ZHL11]. **Roothaan** [BMW14, SEW12, SEW14, SW14b]. **rootless** [GBC+18]. **roots** [Zou18]. **Rosenbluth** [GB17]. **rotating** [JWC13, KLM+19, LCCC11, TZM17]. **rotation** [BSM13, DIR+19, Ume19, VDAH16]. **Rotational** [AS11a, KSW12, CATK11]. **rotationally** [HC17, QwWL+15]. **rotations** [OML11, PUO14]. **Rotne** [GCH+18]. **rotors** [ZBG+16]. **rough** [EBCB+14, KC14, SKML11]. **roughened** [CLY11]. **roughness** [NEW+18]. **round** [JCL10]. **round-off** [JCL10]. **roundabout** [wH15]. **route** [CMR17, SDL+16, mZfXL15]. **routine** [BDGG19, RM10b, WPD+15]. **routines** [KMO19]. **rovibrational** [CNMC10a, CNMC10b]. **RPA** [CCGC13, DSW+15a]. **RPIM** [DG10b]. **RPMDrate** [SAG13]. **RPYFMM** [GCH+18]. **Rubik** [CD12]. **rules** [Nog17a, Nog17b, Sem16, WL11a]. **run** [GHdF10]. **runaway** [LSF14]. **RunDec** [HS18]. **rung** [DSW+15a]. **Runge** [BM13, CFMR10, DBMR18, DIP11, DM17, FG13, Ixa12, KMS14, KZC+10, KAS12, MIW+12, MKS10, NS15, WXL13, WW10, YZWR14]. **running** [CDS13a, KPV16, SS12]. **Runtime** [ÜS18, ER19]. **RWG** [ZDWY10]. **Rydberg** [SPAW17]. **Rys** [AG12b, Sch14b].

S [BL18a, CCK23, Maź19, XYZX19, BFD+11]. **S-IEQ** [XYZX19]. **S/PHI/nX** [BFD+11]. **SaaS** [VPMVH+17]. **SADE** [FF11]. **SAFT** [ESM17]. **SAFT-** [ESM17]. **Sailfish** [JK14]. **SALMON** [NSH+19]. **Salpeter** [GGG16, GVS+15, SAW18]. **sample** [MP11, HJE+19]. **sampled** [GGG+19, ME18]. **samples** [MPSV15]. **Sampling** [BBV+16, Hal17, KBT+14, RPB+15, BFM10, Boe18, CND11, FLE19, GM14, IIO16, IFOI18, KCN18, KD17, KI11, KS16b, KSW15, KS15, LWL12, PPS10, RLBC+14, Sør19, SOYHDD19, SSBS15, TBZ12, WLH+12, Wil15, XLL15, YK10, YL12, ZF15]. **SANC** [AAB+10a]. **sandpile** [AS11a]. **Sar** [TU14].

SARAH [DNPS13, Sta13, Sta14]. **Sassena** [LS12b]. **SASSIE** [CRNK12]. **satisfactory** [DGST17]. **SATLAS** [GdGB+18]. **saturated** [JHJG14]. **saw** [BBC+13a]. **SAWdoubler** [SBB13]. **Saxon** [DT18, MAM14]. **Sb** [AM14b]. **SbNCa** [BKA+14]. **SC-NBL** [KHN19]. **Scala** [Pos19]. **Scalability** [ZZG+16, APC+14, SCM13, VV18]. **Scalable** [ASA18, AIG16, KMM+19, NSH+19, VFV19, BL19, BVC13, BY17, BHND16, BENK+17, DHJ13, DG10c, FWS+17, GGI+13, GP13, ILZ+19, JPH+14, KC18, MTM13, VBG+10]. **scalar** [AHK+12, BMS+16, CEZ16, LS19, LZZL10, PQTGS17, SAHP15, vH11]. **scale** [BMC+11a, BC10, DdJC+19, Bis15, BHJ+15, BHJ+18, BAF18, BY17, BC19, CB15a, CB17, CB18, DSW+15a, Deu16, DADS11, DO14b, DML+16, GS15, GHvdL11, GZL14, GHdF10, GBS+16a, GAO13b, HLS12, HLS+17, HKK11, JEFP14, JXTS16, JWCW17, JOK13, KHZ+18, LCQF18, LR13, LR16, MBS+10, MCNRC16, NLB+19, ORS+14, OP12, PLD+13, RLM13, Sch14a, Sha13a, SXW+18, SMUT19, SLZ16, SPSP18, Tau10, THDS16, TIMM13, TIM+16, UBRT10, VBG+10, WSI13, WDL11, WSH+12, WLZN17, YFAT17]. **scales** [HCM19]. **Scaling** [ZMJ13, AS11a, BH14b, BH16, CCWL11, FUSH14, FVH18, GNA+15, GYW+10, HHS+10, JWCW17, KBB+17, LD10b, MMO+17, OOK+12, RWKS15, YKK+19, dSVLP13, vMB14]. **scanning** [Fer15, PSMS14, PSMS15, TCK+15, MAC12]. **Scans** [Mau16]. **scar** [TTS11]. **SCATCI** [ART17]. **scatter** [LP15, MTO15]. **scatter-gather** [MTO15]. **scattered** [End11]. **Scattering** [BD12, AV13, AKR15, AFIS12, Bab14, BH16, BH17, CKLM10, CAN11, CGRB14, CRNK12, EW14b, EW16, GLAC13, GMC18, HC16, HHT14, HL19c, IB11, Jab17, KC14, KB15b, KL11, KvdO11, LHJZ10, LN16, LS12b, LWES18, LAG+17, MLR10, OK14, PNL13, PR10, PKRS16, SMOB19, SNG+11, Ser10, SKML11, SAS11, SDL+16, TACA15, TVGB15, WJCZ18, WFDK19, ZHSL13, ZYL+19, ELL+17a, XNK+16]. **SCBiCG** [GCHL15]. **scene** [CFCB12]. **scene-dependent** [CFCB12]. **SCF** [WPD+15]. **Scharfetter** [PFFK19]. **Scheduler** [ALS16]. **Scheifele** [YZZ11]. **scheme** [AAD13, AAD14, ACML11, ACTP15, BM13, BBC+13a, BE14, BMBC+17, BB12, CWS14, CZD15, CYN19, CWY+17, CEF16, DJ11, DM17, DOP17, DML+16, EW14a, EW14b, EEGW12, FOB+15, Fu19a, Fu19b, GN14, GRLS18, HP14, HZ11, Jiw15a, JSLM16, JP10, KC14, KHK+11, KZC+10, KP14, LJE11, Les16, LS12a, LLXK16, LL19, LWES18, LB10b, MWI+19, MKU+12, MS14, MF17, McM17, MN18, MMA15, MBB+19, MS15, MD10b, ICD13, NO14, NAQ16, iNSK+15, OKM12, PZZL19, PA13, QSC14, RHW+12, RH11, SP16, SR12, SK15, SSH+13, SCLW16, SD10b, SA15b, SC15, SB11, Sok13, SW12b, SCM14, TKJ19, TD17, TYH+15, TCP13, UNK12, WZS+11, WG16b, Yua19, ZY19a, ZNT15, ZWC+19, dTOV18]. **scheme-independent** [Les16]. **schemes** [ACMM10, ACM12, BK16a, Cap13, CBAM12, CM14a, DBMR18, DJ14, FDZ17, GA10, GLW14, HWS16, HJ14, IKS19, JKIS16, Kaw19, KPVvdH13, lLsSZ14, LYL+17, MIW+12, PFFK19, PTMDPK14, QA13b, SP18b, SYE+18,

Ume19, XHLUF+18, XYK12, XYZX19, YZ16, YZ19, ZKS+18, dlRM18, vdS10]. **Schild** [WN10]. **Schmidt** [CBGY17, CBYG18]. **Schnek** [Sch18]. **Schotte** [Gor19]. **Schramm** [SW11]. **Schrödinger** [ABB13, ABH+19, BAR12b, CWS14, Cap13, CPV13, CZS10, CSJ+17, DT10, DT11a, DM17, Dua10, DM12, FE11, GS15, GG16, IKS19, Ixa10, JYPA18, KZC+10, LV14, LWZ14, LST15, Lin13, LB10b, LY16, MC16, Moh14, ICD13, MNOØ11, ÓN12, PAS11, PM16, QSC14, SFV19, SSH+13, SB11, TD14, TT14, TY10, Wan10a, Wil19, XZ12, ZST11]. **Schrödinger/Gross** [ABB13]. **Schroedinger** [SMdONF14]. **Schur** [UKKB19]. **Schwarz** [HLLH16, HCSW10, TVT+16]. **Schwarzschild** [JLM18, Jia18]. **Schwinger** [CKCS13, HB12, HM12b, SAW18]. **Science** [LSJ13, SNG+11, TN11, CKhN11]. **sciences** [GMH11]. **Scientific** [CCdC+11, AMR+18, Che11, CSRV13, Dan10a, Dan10b, Dan11, Dan12, JVR12, OTC14, RSSH+10]. **scintillators** [KME+11]. **scrape** [JHL+15]. **scrape-off** [JHL+15]. **screened** [GWL+17, GH11, JH15, JZZ+19, PH11, ZHPS10]. **screening** [CSC11]. **scripts** [CF16, Gio14b, RJW+19]. **SCTE** [MGFRG12]. **SE** [NAQ16, QYM11, QA13a, SP18b, WZS+11]. **Search** [ATA+19, BBB+11, BPSS18, BG13a, DR12, GCC+18, HJE+19, JTP15, KPVvdH13, MTS+16, PP13, PMS+15, TC11a, WP11, WRFS15]. **searches** [GTL+17, VPP+12, WRVdL15]. **SearchFill** [DBJ11]. **Searching** [KBLJ18, Ano11a, LOK+16]. **SecDec** [BH13, BCH13, BHJ+15, CH11a]. **SecDec-3.0** [BHJ+15]. **Second** [BB13a, HD17, ADdM15, ACDdM19, BKV16, GPS+13, KTB17, Kir10, KBB+17, LX12, LJSW11, LW14b, NS15, NO12, PKT15, Pla16, RL10, VEB+18, WC13, WYSW10, WT15, ZY19a, Zit11]. **second-order** [BKV16, GPS+13, KBB+17, LW14b, PKT15, RL10, WC13, WYSW10]. **second-quantization-operator** [Zit11]. **secondary** [BMC+11a, CL11, KMO19]. **section** [ALL+11, BS13b, BHS15, CYD11, CM14b, DHS14, OILK17, SGAA18, Shi16, vdS13]. **sections** [ASEA14, BPC12, Cip11, Cip13, DLM18, Gao13a, GLS+13, Kol14, Lit13, PDL+18, VC10]. **sector** [BBH+11a, CH11a, KU10]. **sectors** [BM19, BBH+10, KKSY18, KZ11]. **Security** [ÖY13]. **sediment** [SYD17]. **see** [BBC+13a]. **see-saw** [BBC+13a]. **seed** [RMS+12]. **seeding** [ASPW13]. **seepage** [BLV+19]. **seesaw** [CGV13]. **segment** [LFG14]. **segment-wise** [LFG14]. **segmentation** [MGO13]. **Segmented** [KS16a]. **Seismic** [LZZL10, CL15a, GMRHRCME13, MCAdF14]. **SeismicWaveTool** [GMRHRCME13]. **Selecting** [CB15b]. **selection** [ABH+19, BPSS18, CLH+17, CZZ+19, HJH17]. **selective** [JK13, TIMM13]. **Self** [BMC+11a, CCGC13, ASGLK10, AK15, BCH11, Buc19, CDTV10, CGSB18, Den10, DR12, Erm18, GCVA14b, HPKF15, KOK17, MT13, MLEM19, NPVR14, PB13, Pit12, QHC+10, SEW12, SEW14, SBB13, SHNM11, XNK+16]. **self-adjoined** [GCVA14b]. **self-avoiding** [SBB13]. **self-bound** [MLEM19]. **self-consistency** [SHNM11]. **Self-consistent**

[CCGC13, Buc19, CDTV10, DR12, KOK17, NPVR14, SEW12, SEW14, XNK+16]. **self-consistent-field** [Erm18, Pit12]. **Self-energy** [BMC+11a, PB13]. **self-force** [AK15]. **self-forces** [ASGLK10]. **self-gravitating** [MT13]. **self-interactions** [BCH11]. **self-motile** [HPKF15]. **self-organized** [CGSB18]. **self-polarization** [Den10]. **self-questioning** [QHC+10]. **selfadaptable** [CFCB12]. **Selfconsistent** [ELL+17a]. **Semi** [DS15, GHBL18, GHMB+19, KZC+10, MHWH19, BB12, CZD15, DS10, Ein16a, FJK+17, GZZ19, GAB+16, IBP+15, JYPA18, Lan13, LHH+12b, MCV18, MIW+12, MRVF13, QSC14, Ser10, SMdONF14, SHL+11, UNK12, WG16b, Wie15, ZLL13]. **semi-analytic** [Ser10]. **Semi-analytical** [MHWH19, DS10, FJK+17, MRVF13]. **Semi-analytics** [DS15]. **semi-automatic** [Wie15]. **semi-axis** [SMdONF14]. **semi-classical** [MCV18]. **semi-discretized** [JYPA18]. **Semi-explicit** [KZC+10, QSC14]. **Semi-Implicit** [GHBL18, GHMB+19, BB12, CZD15, GZZ19, IBP+15, LHH+12b, MIW+12, SHL+11, WG16b]. **semi-infinite** [ZLL13]. **semi-Lagrangian** [Ein16a, GAB+16, Lan13, MIW+12, UNK12]. **semiconductor** [ASGLK10, AK15, ACCB13, Bot12, CM15, CL10, CLL16, DJ12, GTG+11, HHC16, MiH12, NAQ16]. **semiconductors** [BMZ+18, GC12, KOK17, LZL11, PFFK19]. **semidefinite** [VvAV+11b, VvAV+11a]. **semiempirical** [IIO16]. **semismooth** [CB15d]. **semismooth-Krylov** [CB15d]. **Semtex** [BLAS19]. **sensitivities** [GA13]. **sensitivity** [CSC11, HS14a, KTA12, PPS10, SAA+10, SK10, TBZ12, WLH+12, WLS13]. **separation** [MSRL10, SJW10]. **separations** [DSK19]. **sequence** [GCF+17, HLD13, ÖY13]. **SequenceL** [BBB+17a]. **sequences** [DBB12, DB13, PdMML19]. **sequential** [AL17, NM14]. **serial** [CUL+17]. **series** [ADdM16a, ADdM17, BDJS18, CZ17, CC10a, CO11, GMPFC+14, HvWT17, LLHC11, NO12, YZCS18]. **SERS** [CLY11]. **SERS-active** [CLY11]. **servers** [WMK11]. **Service** [MLR10, HDF+19, VDJ+11]. **Set** [NHSY15, CK18, FM12, FHA17, Ki10, KN13, MBFB13, PVK+18, Pit12, RCGT16, XHLM12, XLX+15, YS17, MFG+13]. **sets** [Cor14, FBG10, GJLB12, JH15, SZC+13, VdLF14]. **setting** [CNS+14]. **setup** [FJ19]. **several** [GCHL15]. **sfermion** [HEF12]. **SFOLD** [HEF12]. **sGDML** [CSP+19]. **SGO** [CJJ+17]. **SGS** [ZSW+17b]. **Shafranov** [HS14b, SVS19]. **Shakhov** [ZXZ+19]. **shaking** [RHHF12]. **shallow** [QM10, STA18]. **Sham** [KKL+18, SCS12, SCB17b, SPSP18, zYCG+18]. **Shape** [DGMZ15, BNPPD19, NS11b, OK14]. **shaped** [HSD17, KKO19, MSR+17, Nov17]. **shapes** [AIG16, GTPWL12, GGGH14, HS19, XLX+15, YLYL17]. **Shardlow** [LBM+14]. **Shardlow-like** [LBM+14]. **SHARE** [PLRT14]. **Shared** [DKG+14, BKS15, CL15b, LRSS19, NFS15, TE18, WMRR17, WRMR19]. **Shared-memory** [DKG+14, NFS15, TE18]. **sharing** [TRM+12]. **sharp** [CDL+12]. **SHAVEL** [ME18]. **shear** [BF10, CMVRB+14, SPTPR19]. **shear-shear** [CMVRB+14]. **sheath** [KMD12, KM17, KSY17].

sheath-plasma [KMD12, KM17]. **shedding** [TKL+12]. **shell** [ACTP15, BM16, Cip11, DT18, Faw10, MCA17, SMUT19, Trö11]. **shell-model** [BM16, SMUT19]. **ShengBTE** [LCKM14]. **Shepard** [FZY13]. **shields** [OVSI15]. **Shift** [KHN19, Ber14, EJG+19, FZ16, NGG+13, Ram10, RLM13, STY15, STY18]. **shift-invert** [RLM13]. **shift-operator** [Ram10]. **shift-without-invert** [FZ16]. **Shift/collapse** [KHN19]. **shifted** [ABF19]. **shifts** [NLSJ17]. **shock** [Fu19a, KR14, PBD+15, QLE16]. **shock-capturing** [Fu19a]. **shock-fitting** [PBD+15]. **Short** [BBF+10, ADD+11, BTM+17, BWPT11, Fri10, FN17, HWL+17, Ram10, TKR13]. **short-range** [ADD+11, BTM+17, FN17, HWL+17]. **Short-recurrence** [BBF+10]. **short-time** [Fri10]. **shorter** [BL18a, dJBIM16]. **shortest** [BGHN19]. **shot** [HLS12]. **showers** [BG14b, GRZ10, TS10, War16]. **shuffled** [AZM14]. **Si** [CHW+15, Dan16, MTS+16]. **SiC** [Dan17]. **sides** [STK10, TKS10]. **sign** [BH11, Kap16]. **signal** [JHJG14, LCRL10]. **signals** [CCM12, CWY+17, HCM19, PMS+15, SSP16]. **signatures** [RMC16]. **significance** [SC14]. **silane** [SVG10]. **silicene** [ZRS12]. **silicene-like** [ZRS12]. **silico** [HG13]. **silicon** [GWL+17, LOK+16, OPO+11, OPSR13, OPR14, PVH+17, Wit14]. **Simak** [Maź19]. **SIMD** [BDL+19, PH13, VLL+17, WN19]. **Simflowny** [AABC+13, AMR+18, VMGP+19]. **Simflowny-based** [VMGP+19]. **similar** [FS17]. **Similarity** [BEKP19, LLQX19]. **SIMLA** [GH15]. **SimPhoNy** [AKH+18]. **Simple** [DSW15b, NOR15, PM16, AL17, AKV18, BBB+19, CCL15, DZ15, GAHP15, KKG+15, KOK17, RU13, SGM11a, SGM11b, WWC+16, WCT11, XWhZ13, XW15, YZY10, YB13, dSVLP13, LYJH19, PGMU19]. **SIMPLE-NN** [LYJH19]. **simplex** [Kap12b]. **simplification** [SBQ14]. **simplifications** [BD12]. **Simplified** [vMB14, AKK+18, SA14, TVZ+15, YZWR14]. **simulate** [AMM11, BVSG19, CUL+17, JWC18, MPM14, RTT+18, SQA+15, TXZL15, TS10, WGG16, ZBG+16]. **Simulated** [BL14, BSM13, BDKS10, CM10a, CD12, HG13, IZRT15, LM12, VdLF14, VDF15, Yam16]. **Simulating** [GH15, Gre18, Hoh14b, RFSF18, Wan16, Wei11b, BHNS17, BENK+17, CJ12, DMC10, HGCARM15, JPK+12, KPOR18, LHH+12a, LL15, LL12, OK18, SV14, SJY18, SJY20, WX11, WFDK19, WMI19, XAPK14, XD16, YWW13, ZKG+18]. **Simulation** [AZS+11, AKR15, Bar12a, BdVGS11, Beu11, BBRS19, CM15, CAGL13, EFG+10, FBP+14, HEPW13, Hon10, JP11, KKS18, MHV17, MTE17, OBM19, PPV+11, PC11, RF10, RSBB14, SKK+19, SÓÓN11, SKH+10, TKZ18, UIY11, XLX+15, AKH+18, AFIS12, ASPDL+16, ALSW14, AIG16, AABC+13, AMR+18, AAJA14, BLV+19, BF16, Bar11a, BK16a, BE14, Boe14, BCM+16, BO12, BHND16, CHNS18, CC16, CGSB18, CXG+19, CHC+11, CSSB15, CHH+11, CvW12a, CvW12b, CdFDS16, CF17, CCN17, DXY+19, DG10b, DSW+15a, DHJ13, DBP+18, DES+11, DDM14, FYK18, FLZ+18, FFT+14, FGC+11, FFIH11, FM15, FN17, GC12, GTPS19, GM11, GRR+14,

GRZ10, GSB+14, GHMB+19, GB14, Gri11, GRTZ10, GTK+19b, HBE10, HBL+13, HL19a, HKJ+12, HT12, HvAS+13, HXW+13, HAN+16, Hsu11b, HB13, HHT14, HCSW10, JA17, JXTS16, JLM18, Jiw12, JPM12, JAS17]. **simulation** [KOT12, KDM17, KS19, KGFS18, KNS+17, KO12, KO13, KKO19, Kro16, KMJS16, KCS+15, KP14, KSYY13, KQYH17, KSY17, LCC13, LDR+17, LJE11, LJSW11, LCH11, LX14, LSK+13, LYZ13, LS17a, MD10a, MT13, MGRB11, ML17, MTSI11, MKU+12, MMC10, MSNI11, MFG+13, MRL19, Mül14c, MSH11, NFI17, NB17, NP19, NLB+19, NZQL14, NM14, NFS15, OKM12, OYK+14, PKT15, PZL+19, Pei18, PVK+17, PCEH15, PA13, QL10, RF16, RJW+19, RB18, RTT+18, RD10, RLBC+14, RKGC+17, Sal12, SBH+14, SCC+12, SSF+17, Sch18, SM19, Sha18, Sie16, SS11b, SBPD19, Sit18, SVG10, SKM15, SMCB+15, SBL16, SBE+16, TJD11, Tab16, Tan19, Tau10, TL17, Tic10, TVGB15, TMS19, TIMM13, TGH+16, TCCV18, TMD11, TB14, TIM+16, TPC16, VDB14, VPMVH+17, VRV15, VEM12, VK16, WP11, WS11a, WGVPL17, WGG+19]. **simulation** [WSI13, WBY11, WBS+18, WT12, WL11b, WLZN17, YLQ+17, YBNY13, YLKN17, YG12, ZFH14, ZXL16, ZZD+16, ZZHG18, ZHC16, ZPvR16, ZBN+19, ZLFM11, dlHV12]. **Simulations** [APRG11, Bab14, LDW13, TKL+12, AM14a, ASGLK10, AK15, AD15, AGB+15, AMJ18, ABRS12, BJBC+14, BBB+17a, BT17a, BB13a, BHS18, BS15b, BSC+13, BFPP12, BBF+13, BBS14, BPML12, BDBV12, BVP10, BG11, BTL+17, BCDI12, BB13b, BY17, BC19, BBV+16, CDS13a, CB15a, CB17, CB18, CTT17, CMM14, CHA11, CXH+15, CLL16, CW16, CCL18, CL11, CZGC19, CPHL14, CFF19, CBGY17, CH11b, DZ15, DSHS17, DGJH19, De 11, DEMM19, DS13a, DPK+15, DF13, Dem11, DF14, EBCB+14, EVB14, EBCBG17, ESM17, Evs14, FCVH17, FW11, FRFH10, FKH15, FPY+17, FHA17, FB19, GHK19, GHdF10, Gio14a, GLR17, GNA+15, GAB+16, GSKM14, GSKM15, GM14, GJHF14, GJB11, GZWJ18, GBJ+15, GCH+18, GB17, GMHZ19, GM18, HJH17, HO13, HS14a, Hin11, HPKF15, Hoh18, HYM11, HLZ+13, HM17, HHM+15]. **simulations** [HKK11, HHP+16, JBKM15, JBG+16, JBG+17, JFHA19, JPH+14, JvOK17, JJ15, JHL+15, JVR12, JKIS16, KRM+19, KÓG17, KK16b, KC14, KP16, KSS18, KS16b, KHK+11, Kon11, KGG+16, KRB15, Kra18b, KLO+19, KHN19, LYP14, LPC+15, LGW13, LLSK17, LS14, LS15a, LS15b, Les16, LWL11, LYX+17, LHZ11, LYL+17, LOK+18, LKW11, LSK+14, LHB+19, LBP15, MMSF+15, MDW16, MÅWK18, MIW+12, MIW+13, MAC12, MMO+17, MKL17, MM17, MP11, MFS+10a, MS14, MRZ10, Maz13, MNV13, MVI+16, MHR+13, MMA15, MNPF17, MTO15, MKB+11, ML16, MSM+11, NJ18, NBM+15, NNWS15, NDSH18, NFA+16, Ngu17, iNSK+15, NVW+13, ÖKC11, ORI+10, Oti13, PHT+19, PCGM14, PG17, PLD+13, PE15, PLCC12, PDJ10, Qia17, RKVL14, RtV16, RV11, RHHF12, RJKC16, SH12a, SCB+17a, SCB+19, SFP11, SISW10, Sco13, SXW+18, SOM+13, SLZ16, SKK17]. **simulations** [SJ11, SS11c, Sok13, Sør19, SYE+18, SCM+16, SCM13, Sus17b, TM19, TK14a,

TSK+17, TSTT13, THDS16, THDH14, TS19, Trö11, TYH+15, UKKB19, UBRT10, UO15b, UO15a, VBG+10, VV18, VK14, VMFS16, WFM14, WJCZ18, WWHW14, WWC+16, WNYP17, WFZG19, WTH15, WYH19, WDL11, WSH+14, Wie18, WWVB11, WSH+12, WWFT11, WAW14, WWM14, XYM+13, XGH+19, YW17, ZW15, ZMvE+13, dSF18, dHGCS11, VFV19]. **Simulator** [CP15b, ATW+19, DJW+19, IW15, MBRV+13, NSH+19, PR14, ZAFAM16, KDP+14]. **simulators** [YSLY19]. **simultaneous** [Kra18b, SGDS16]. **sinc** [MM10]. **sinc-collocation** [MM10]. **Sine** [SW14c, AH13, DG10b, GMHZ19, JPM12, MD10a, Pál12, PTS12, dlHV12]. **Sine-Gordon** [SW14c, AH13, GMHZ19]. **Single** [FHA17, GM16, HKZN19, MAM14, Aza13, CATK11, CSL+13, DKT14, EY11, EBDM17, JA17, JXTS16, KKK+15, LHSL14, LBP15, RV10, RV11, SD14, UW12, WG16a, WBY11, YZY10, ZLFM11]. **single-** [JXTS16, LBP15]. **single-crystal** [WBY11, YZY10]. **single-electron** [JA17]. **single-molecule** [EBDM17]. **Single-step** [FHA17, GM16]. **single-tag** [DKT14]. **single-walled** [CSL+13, LHSL14]. **singular** [CZ18a, GWF+16, HKSW10, MC16, NO12, SK14, ZX10]. **singularities** [BAK+15, BAK+16, BAK+17]. **singularity** [PPY14]. **singularly** [GN14]. **Sinusoidal** [RHHF12]. **SIP** [FXZ+14]. **SISCone** [Wei12]. **site** [DMC+15, SFP11, YHCS11]. **site-diluted** [SFP11]. **situ** [KY14, MMC10]. **sixth** [LST15, NS15]. **sixth-order** [LST15]. **Size** [GWL+17, VKLM11, AS11a, BM13, BHNS17, Evs14, MDPTK15, MST+18, OBH10, OOGP19, SSP16, ZHCR18]. **size-dependent** [ZHCR18]. **sizes** [Cas12]. **skeletons** [BRB12]. **skew** [GBRB11, HM18]. **skew-symmetric** [GBRB11, HM18]. **skin** [ZZHG18]. **SKRYN** [CB15d]. **Sky3D** [ASA18, MRSU14, SRS+18]. **Skyrme** [RHBH15a, CCGC13, PSL+17, RHBH15b, SDM+12, SDS+17, SSK+13]. **Skyrme-HF** [RHBH15a, RHBH15b]. **Skyrme-type** [CCGC13]. **skyrme_rpa** [CCGC13]. **skyrmion** [BUJ15]. **slab** [TAFD19]. **SLABCC** [TAFD19]. **slabs** [LN16]. **SLAM** [MZ14]. **Slater** [USOA13]. **slave** [QwWL+15]. **slave-boson** [QwWL+15]. **SLDMOL** [CZN14]. **sleep** [SLC11]. **SLHA** [Mur14]. **SLHAplus** [BCPS11]. **slicing** [SCS12]. **slightly** [BAF18]. **SLIMP** [ZZ15]. **slip** [ZLZ19]. **slope** [CZZ+19]. **Slow** [SDJ+12, WL11b]. **Slow-to-start** [SDJ+12]. **Slurm** [OBPL19]. **small** [Ber14, BBV+16, FLP10, JLW13, PP13, QHC+10, TIMM13, dSLF13]. **small-world** [FLP10, QHC+10, dSLF13]. **smallest** [DS15]. **Smilei** [DBP+18]. **SMMP** [YK10]. **SModelS** [AKK+18]. **smooth** [CCLL18, Cou13a, Cou13b, GGG+19, Qia10, WG16b, WvSL13]. **Smoothed** [FHTO17, GRLS18, KS16a, PE15, DCVB+13, DCGG13, EKK14, JXTS16, KPPC13, NFS15, RH17, RTA10, SN16, WRR18, YK19, dASJC+19, CDR+15]. **smoothed-particle** [dASJC+19]. **smoothing** [HHC16]. **SNEG** [Zit11]. **snowdrift** [QHC+10]. **SO-FDTD** [LJD+19]. **SoAx** [HL18]. **soccer** [dSVLP13]. **social** [CHDF10, IBKK11]. **socket** [TRM+12]. **soft** [GSC+16, HBL+13, KL11, NFD+19, SM19, SM19, WS11b]. **SOFTSUSY**

[AAT+20, AAT+14]. **SOFTSUSY3.0** [AB10]. **SOFTSUSY3.2** [AKH12]. **SOFTSUSY3.5** [ABdA15]. **SOFTSUSY3.7** [AMRdA17]. **SOFTSUSY4.0** [AC17]. **Software** [Jav17, MCY+16, NFA+16, SSP16, AKZ+13, BMF+19, BCG+15, BRH+16, CPCDdM18, CYOS19, Dan12, FBC+12, GXF+15, GJA+16, HBH+17, HM10, HM17, KMM+19, KST+14b, LPC+15, LHGF18, LSK+14, MÅWK18, MNL19, MMY+19, NBW16, ORI+10, Ost10, PVH+17, PMS+15, RDP14, SD15, SCC+12, Sin11, Sin12a, SLR16, SS18, Sou14, SJY18, SJY20, TL17, VPP+12, WGG16, WGG+19, WZS+18, zYCG+18, ZMvE+13]. **soil** [OML11, PBF+16]. **soils** [GTSL+13]. **SOL** [FLSZ13]. **SOL-core** [FLSZ13]. **solar** [DJ12, FXZ+14, GSKM15, HGCARM15, Kap16, WFZG19]. **SOLARPROP** [Kap16]. **solid** [BCP+16, Bot13, CCD+16, HXW+13, JPCG15, KS16a, Miu11, NGCI+12, dlRAPL11, PLD15, QDZ+13, UA17]. **solid-fluid** [CCD+16]. **solid-solid** [QDZ+13, UA17]. **solid-state** [dlRAPL11]. **solidification** [YK18]. **solids** [AKZ+13, Hin11, Jab19, MSHLS15, MSHL17, dlRJL14]. **solitary** [AS11b, DS11b, DN13]. **soliton** [DT11a, Pál12, TD14, XLL15]. **soliton-like** [XLL15]. **solitons** [DG10b, GMHZ19, HWCH11, JPM12]. **SOLPS** [SCB+17a, ZCC19]. **soluble** [vdSM16]. **solute** [DMC+15, JJ15, RNdB19, XHLM12]. **Solution** [APV10, CDTV10, DS10, LHC+13, PH11, RHBH15a, RHBH15b, SDM+12, SDS+17, AGH+16, AH13, BSM13, BH16, BKS15, Bis15, CDMCN11, CSJ+17, DMP18, DT11a, DS11b, DN13, DSW+15a, FGLB12, FFIH11, FM15, HKSW10, HVP+19, HK12, JK10, JL10, Jiw15a, KAS12, LD10a, LD10b, LV14, LZP12, LLP15, Lin13, LWW10, LZ12, MJB+10, Moh14, MA11, MM10, MNC15, NFI17, ÓN12, OK14, PSBT12, PAS11, PDRG10, PR13, PTS12, PSL+17, RDP14, RVA14, RM10a, RM10b, RLM13, RGKR17, SFV19, SW14c, SD10b, SS13b, SSH16, SK14, SSK+13, VBG+10, YZ16, ZDWM17]. **Solutions** [Lev19, AD14, ADdM12a, Beu11, CZ18a, CB13b, DGST17, Er14, JLW13, KMM13, Krö19, LLL12, LLL13, sL10, Mar19, MC12, MSZW11, MK10, MNOØ11, NO12, PAS11, PS14, SR12, TD14]. **solvated** [WFM14]. **solvation** [ZPH+15]. **solve** [AD14, AD15, ADdM12a, DG10a, JSLM16, ÓN14, RJLL16, SS13c]. **solved** [ACMM10]. **solvent** [CBB14]. **solvent-filled** [CBB14]. **solvents** [ZBG+16]. **Solver** [DSW15b, ALA+19, BMC+11a, BMC+11b, BKOZ16, BAR12b, BLAS19, Bot13, BC11, CVK+17, CP15a, CPV13, CCL18, CZF18, CRLS18, CRA10, CFF19, CBB14, CDR+15, DBLF16, DGG13, DM12, Ein16b, Exl17, FJK+17, FSC13, FE11, FZY17, GS15, Gai17, GBP13, GJ14, GJ13, GNP19, GG16, HWG13, HZW+19, HWM+15, Hua17, HCHW11, KVV19, KDM17, KYM+17, KH12, LYP14, LW14a, LC15, LCKM14, LYX+17, LKPH19, LF12, LWJV18, LWP+17, LCHM10, LCHM13, MC16, MTE17, MGL16, MR14, MCM+12, ML14, MFM15, MVS15, MCL+17, OILK17, ORS+14, PZY16, PMS+17, PBD+15, Qia17, QSB19, RVDS16, RDVS18, RC13, RC16, SVGS18, SVS19, SKFP16, SSX14, SGW17, SLEF17, TL17, Ter17, UKKB19, VL19, VV16, VV18, WFZG19, WBS+18, WC13, Wit14, sX14, YXT+15, YWOD19,

Zag14, ZPH+15, ZPvR16, ZCG17, ZPS+18, HB13]. **solvers** [AL17, BSK+18, BB13b, CB18, CGM17, CBB+10, CSV+18, DBMR18, DZ13, FR15, GWF+11, HC17, Hoh18, JHH+19, LV15, Qia16, VLPPM14, zYCG+18]. **Solving** [BAK+15, BAK+16, BAK+17, CD12, CBB+10, Dem13, DPB16, DSP15, ENEO15, Fan19, Fil13, FGG11, HAK+14, HAH13, HS14b, IH11, JC16, Jan10, LV10, RHH12, SMdONF14, VSO+13, BK11b, BMBC+17, CS10, CKK+13, DT10, DM17, FGR14, GBSY18, GX15, HLLH16, HM12b, JPSS10, Jal10, Jiw15b, LLMW17, LBB+16, LYSS+16, LAG+17, MHWH19, MLS10, MM12, ICD13, NAQ16, PS11, QYM11, QA13b, QA13a, RL10, Ras09, Ras17, SSB+16, SSH+13, SP18b, SCLW16, TY10, TKS19, UNK12, VVB+12, Wil19, WFV14, XWF18, XZ12, YZWR14, YSVM+16, YSMA+17, ZHSL13]. **SOM** [KH19]. **SOMA** [SM19]. **Some** [CEPI10, FG13, HWCdM19, MR13, MS15, ZHSL13, Er14, Ixa16, KD16]. **soot** [ZLFM11]. **sooting** [EZL+16]. **sorting** [BDL+19, MEM+11, MM11]. **SOSpin** [CECGS16]. **sound** [KL11]. **sound-soft** [KL11]. **source** [AZ17a, AZ17b, AFZ17, AFZ18, ATCZ19, BCP+16, CMC+15, CHC+11, CYOS19, CFW17, CDR+15, DSK19, Dan11, DGJH19, DBP+18, DBLF16, FLA+16, HSF+15, HKvH16, HWM+15, Hua17, JWC18, JNN12, KDM17, KPK+17, KSH14, LPC+15, LZ11a, LZ11b, LZ12, MK10, MZE13, MSNI11, MMY+19, MVS15, MGFRG12, NMS14, NGCI+12, ORS+14, SC16a, SPAW17, SAHP15, SDL+16, TL17, TACA15, VBG+10, VB19, WFDK19, WGG16, WGG+19, WFV14, WPAV14, WZS+18, XAPK14, Zag14, ZCG17]. **Sources** [EW14b, EW16, EEGW12, KM10, ML14]. **Space** [BBB17b, FDZ17, JKG+18, BG11, BAK+15, BAK+16, BAK+17, BY17, CDBM16, CVK+17, Chr18, CSV+18, EUT+15, Evs14, FZ16, FGLB12, GTS14, GBSY18, HLW16, JBG+17, JLM18, Jia18, KKL+18, KS16b, KSW15, KS15, LOK+16, MDHD18, MC16, MBF+10, MJB+10, MGB18, MSS+16, MSM+11, MSH11, NAQ16, OBH10, ÖKC11, OOK+12, dlRJL14, PSB11, PSBT12, QYM11, QA13a, Qia17, SP16, SCRS17, SA15a, SBH+12, UFKB19, XGH+19, ZD15]. **space-charge** [Qia17]. **Space-dependent** [BBB17b]. **space-fractional** [MDHD18]. **Space-time** [FDZ17, CVK+17, Chr18, JLM18, Jia18]. **spacecraft** [MPS13]. **spacecraft-plasma** [MPS13]. **spacegroups** [AZ17a, AZ17b]. **Spaces** [Asc10, Bog16]. **spacetimes** [Mül14a]. **spacewise** [PR13]. **spacewise-dependent** [PR13]. **SPARC** [GS17b, GS17a]. **Sparse** [YOM+19, CB16a, DN18, GBP13, GJ18a, Kra10, SPP19, TS19]. **sparticle** [AC17]. **Spatial** [RLBC+14, ABCM14, BMF+19, BNAB11, FCC15, KS16b, LST15, LJB+16, McM17, MLS10, MSRL10, MGR16, TZG12, VV16, FCC15]. **spatially** [MD10a]. **spatio** [KEH12]. **spatio-temporal** [KEH12]. **Special** [MSI+10, iSSMI11, QA13a, RL10, ZD15]. **Special-purpose** [iSSMI11]. **specialist** [OTC14]. **species** [DGS+19, HAK+14, NNWS15, SM14, SCM14]. **specific** [AZ17a, AZ17b, Gor19, LPC+15, SGM18, XZF12]. **specific-heat** [XZF12]. **specific-purpose** [LPC+15]. **specified** [MD10b]. **specifying** [DZ15]. **spectra** [Aza13, AKV18, BW16, BPMS16, Bru13, CM15, CCL15, CGV13, DA16,

ECSH16, GGG16, HW11, MGRB11, MSPD12, MNPY14, MB16, PBMAD12, Pos18, Ruf13, SC16a, TKP12, TVGB15, WFDK19, YLTS16, Zlo13].
Spectral [BAF18, Hak16, Hak19, MLS10, SPSP18, AH13, AKV18, BLAS19, BCM+16, CDBM16, CMC+15, CvW12a, CvW12b, Col14, GMHZ19, HS14b, HZW+16, Kap12a, KZC+10, LSDD14, LW14a, LV15, LKA+16, LCCC11, Liu11, Liu13, LDF+16, Raw15, SI11, SLY18, ST19, SNB11, SVV19, SMdONF14, TD14, Wan10a, YXD+15, DBLF16, PSP16, SMdONF14].
spectral/ [BCM+16, CMC+15]. **spectrally** [ABDR17]. **spectrometry** [CWY+17, SMCB+15]. **spectroscopic** [Hak16, Hak19, MM11].
spectroscopies [CMJ+11, SNG+11]. **spectroscopy** [GSB+14, Hoh14b, HTT13, HTT14, HZC19, LCL+11, MGA+13, RMW13].
Spectrum [FCC15, HS19, Ruf13, AB10, AhPSV15, Bru13, CC10a, Gar19, GWF+16, GCF+17, JK13, KZ11, MZ14, OCL+13, Rom15, SCS12, SAE+16, ZUT13].
Speed [LGW13, MSR+17, CNS+18, Fu19b, JTP15, MTE17, VL19, WLM14, YvOSM15]. **Speed-up** [MSR+17]. **Speeding** [GMC18, MED11, KC14].
Speeding-up [GMC18]. **speeds** [SSX14]. **SPFP** [LGW13]. **SPH** [CRLS18, CDR+15, ACMM10, ACML11, ACM12, BE14, CCD+16, CP15a, CPR12, CdLOL19, CBAM12, EDPZ19, FJK+17, JOR+12, KGFS18, KPPC13, Lan13, MRVF13, MRSD15, OLG+16, RJLL16, SYD17, SCM+18, VSO+13, VKP14, VSG18, WMRR17, WRMR19, XLX13, XD16].
SPH-DCDEM [CCD+16]. **SPH/SPMHD** [VSG18]. **SPheno** [DNPS13, PS12]. **sphere** [LPRPR17, ME18, RC18]. **spheres** [AYDY11, CKLM10, LDW13]. **Spherical** [ASS13, Bal19, BMG+15, Cai11, CDTV10, CCK23, Den10, DT18, GDB10, GC10, GC16, GC18, GCK19, KT10, sLqSqL+13, ME18, NKS15, PM16, RV11, SR12, Ser17, TO10a, YÇÖ15].
spherocylinder [FBP+14]. **spheroidal** [Kir10, OWS+14]. **spheroids** [ALSW14]. **SPICE** [EFG+10]. **SPILADY** [MDW16]. **Spin** [BW11, BJBC+14, BPP11, BFPP12, BBS14, BR13, BVP10, CL14, CB15d, CAGL13, DRR16, FW11, HvWT17, IZRT15, IUM13, KO12, KO14b, Kom15a, Kom15c, KO16, LBP15, MDW16, PdMML19, RRCSCJ10, RLS16, RE12, SHZ13, WX14, Wan16, WLGY18, Wei11b, WPAV14, XJS16, Yam16]. **spin-** [HvWT17, SHZ13]. **spin-adapted** [WPAV14]. **spin-dependent** [XJS16].
spin-ice [IUM13]. **spin-lattice** [MDW16, Wan16]. **spin-orbit** [CL14, RE12, WLGY18]. **spin-orbit-coupled** [WX14]. **spin-system** [BJBC+14]. **spinney** [CKJR11]. **spinor** [GLMG12]. **spinors** [CKJR11, Erm18, GLMG12]. **SPIP** [BF16]. **SPIREs** [MCM+12]. **Spline** [LZ17, BH16, End11, Fro11, Jal10, Jiw15b, LD10b, LX12, Lin13, Moh14, PCGM14, RM10a, ZF16]. **spline-Fourier** [PCGM14]. **splines** [RHC15, RCH16, WvSL13]. **Split** [GTS14, BK11a, DIR+19, DT10, JZJ18, JCL+18, OAKS11, PMMF15, Ram14, SB11, WZ13]. **Split-operator** [GTS14]. **split-step** [DT10, JCL+18, OAKS11, Ram14, WZ13]. **Splitting** [Bla15, ABH+19, BE14, BB12, CZ18a, CZS10, GML15, LBM+14, LL19, NAQ16, QM10, QSC14, Sch14a, TD14, TCP13, XLX13]. **splittings** [IKS19].

SpM [YOM+19]. **SPMHD** [VSG18]. **spontaneous** [EZBA16, ZLM12]. **spreading** [SOYHDD19]. **spurious** [BCH11]. **SQDFT** [SPSP18]. **SQERTSS** [DSHS17]. **square** [Ber16a, Ber16b, DSPJ10, GST15, HML11, Lee18, LS15b, LSCZ11, Liu13, Ots11, UW12]. **square-lattice** [Ots11]. **squared** [CB13b]. **squares** [AG12a, Gor19, Kra11, LWW10, Wan10b]. **squark** [AMRdA17]. **SQuIDS** [DSW15b]. **SRD** [TCCV18]. **SSA** [FCC15]. **ssDNA** [AGVP10]. **SSE2** [BS11]. **SSNTDs** [VSG17]. **SSPH** [JOR+12]. **Stability** [FR15, AS11b, Bar11b, BSWC14, CHW+15, HW12, LOK+18, RC15, WRBL19, ZRS12]. **Stabilized** [TXZL15, JTN+11, XYZX19]. **Stabilized-Invariant** [XYZX19]. **Stabilizing** [GA15]. **stable** [DSPJ10, GZW17, Ram14, SS13b, SPS10, WYH19, ZY19a, ZKS+18]. **STAG** [NCB18]. **stage** [CCW10, PZZL19]. **Staggered** [HP14, BCDI12, DJ11, GM18, Mar15, SCLW16, TH17]. **Standard** [AB10, AAB+10a, BM19, DET12, Deg15, ABB+14, ABdA15, AC17, AMRdA17, Ano10o, Cou13a, Cou13b, GLX+14, ABC+18, BCPS11, BCP13, HLM13, KPV16]. **standing** [ACTP15, BMF+19]. **star** [SEW12, SEW14]. **Stark** [CFSK14, PMMW15]. **Stark-effect** [CFSK14]. **STARlight** [KNS+17]. **stars** [VPM12]. **start** [SDJ+12]. **starting** [RLS16]. **State** [BBRS19, RSBB14, ASEA14, BP12, BKS15, Bis15, BK11b, BTC+17, CR13, DBK+14, DLW+18, Eba13, ELL+17a, FTI18, Faw10, FDWC12, GM14, HM12a, JPCG15, JWL13, JTT11, JMG+17, KO13, KSY17, MST+18, MEG12, NDSH18, OK12, OML11, dlRAPL11, Pat12, RLS16, SAW18, SGSG19, TPC16, VS19b, WX14, XZF12, dSF18]. **state-of-the-art** [Pat12]. **state-to-state** [ASEA14, BTC+17, TPC16]. **States** [JWC18, ABDR17, ACTP15, AM17, BR13, BVC13, CLHL19, CWW15, Dua12, FLE19, GH11, HL19b, JDG12, KH11, LKM+16, LV13, Liu15a, LB10a, LB11, LB12, LB13, MH11, Mis12, Mis13, MNPY14, NJS17, RV10, TTS11, XJS16, ZAHA10, dSLF13, vH18, KBLJ18]. **static** [Fuk17, GB17, dlRL11]. **stationary** [AD14, ABDR17, Fis12, GG16, MGL16, VDAH16, ZAHA10]. **Statistical** [Bin13, Mag18, SLC11, SM11, Ano11o, CSRV13, ELL+17a, Fri17, HJE+19, KD16, LLHC11, MW12, PMMF15, Sin11, Sin12a, VLM11, ZF15]. **statistics** [Zlo14, dSVLP13]. **steady** [Bis15, HJGL18, HJGL19, JMG+17, KSY17, MST+18, NDSH18, SK15, YTYA17, ZNT15, dSF18]. **steady-state** [JMG+17, MST+18, NDSH18, dSF18]. **steam** [CLW11]. **steered** [ZF15]. **steering** [MMC10]. **stellarator** [HSD17]. **stellarator-like** [HSD17]. **stencil** [VV16]. **stencils** [DSPJ10]. **step** [ABH+19, BM13, BIT12, DT10, FGR14, FHA17, GM16, JCL+18, KMS19, LS15b, LWYW11, MAC12, MC10, NS15, OAKS11, PAS11, PS14, Ram14, SVV19, SB11, SS10b, Ume18, Ume19, WZ13, YZZ11, PG19]. **step-selection** [ABH+19]. **step-size** [BM13]. **stepping** [AH13, DJ14, IBP+15, QWZW18, SHT18, WMI19]. **Stern** [CBB14]. **Stewartson** [GML15]. **Stieltjes** [GLX+14]. **stiff** [LL12, WMI19]. **stiffness** [BW11]. **STM** [MAC12]. **Stochastic** [EPB+16, JP11, LL12, NEW+18, ÖKC11, PLCC12, STT11, SMJ17,

WSTP15, ZE11, ZE16, ZBMM11, AD15, BdVGS11, DBJ11, DHJ13, DSP15, Er14, FRW17, GJLB12, GMO19, HJ14, JK10, KD17, KBSP12, KH19, LP15, NBM+15, NFI17, PCVZ11, SJ11, VBC+12, YK12]. **stock** [KCL11]. **Stokes** [BKOZ16, BLAS19, EW14a, FDZ17, FBHB17, FM15, LWJV18, MVS15, QSB19, Sal16, SK15, SP18b, VSO+13, ZPS+18]. **Stokesian** [BHND16]. **Stomo** [PR12]. **stopping** [AG12a]. **storage** [Ano11o, BMC+11a, CLH+17]. **strahlung** [DDKM15, BHZ13]. **straight** [BL18a, dJBIM16]. **Strain** [LHSL14, KCA+15, Laz15, WP10a]. **Strategies** [KS15, ABH+19, Cha19, DCGG13, FSJ+16, HJH17, SKH+10, ZHSL13]. **strategy** [BPMM14, BHVMH15, CMRVVR16, CXG+19, FHTO17, LKM+16, LWL12, NM14, WLZN17]. **Stratified** [SSBS15]. **Stratonovich** [KD17]. **streak** [WS11a]. **Stream** [YTYA17, BABC19]. **streaming** [CO11, ST19, WFV14]. **Streamline** [DCM+12]. **streams** [BS13a]. **Strength** [ZFZ19, CLHL19, SW14a]. **strengths** [SEW12, SEW14]. **stress** [CHDCJA17, KCA+15, Voy13]. **stress-fluctuation** [Voy13]. **stresses** [Van15, YK18]. **stretching** [BJ11]. **stripe** [WWVB11]. **Strong** [GNA+15, ZZ15, BMW14, CPHL14, CHZ18, DOP17, HEF+11, MMO+17, RGKR17, SW14b, SS12, YKK+19, ZYZ15, ZY19a]. **Strongdeco** [JDG12]. **strongly** [JDG12, KS19, LKT+16, LDF+16, MN18, NO14, UKKB19]. **Structural** [KAR+15, SWL+15, ZRS12, ÁSS18, Bin13, CZN14, EBDM17, FSJ+16, HYM11, MHV17, PPS10, QDZ+13, RAV11, ZMPT13]. **Structure** [FGJB19, HL18, XNK+16, ACD+14a, AGVP10, Ano10n, ACC17, AFZ17, AFZ18, ATCZ19, Aza13, BK13a, BC10, Bjö11, BBO19, CWJ19, CKSM+19, CPV13, CYD11, CJJ+17, CSK+19, Cor14, DCU+19, DO14b, FLA+16, Faw10, GTL+17, HKSW10, HMR+19, Hol19, HJE+19, HBH+17, JWCW17, JGB+13, KB19, KGFS18, Kra17, Kra18a, LS19, LZP12, LQZ+13, Liu14, LZ18, LH18, LZ11a, LZ11b, LSK+14, LOSZ13, MED11, MSZW11, MW14, MNL19, MNPY14, PSP16, Rut18, San15, SS10a, SCG11, TMA+15, THJ+10, TC12, WG16a, WLZM12, WM13, WAHL13, XLCW14, YFAT17, zYCG+18, YG12, ZLZ19]. **structure-based** [MNL19]. **structure-preserving** [CWJ19, San15, WM13]. **structured** [ACMM19, CVK+17, FRFH10, JBG+16, JBG+17, KK14b, YH15, dBCH14]. **structures** [ÁSTT16, ASEA14, AZ17a, AZ17b, BHN+16, Bot12, CJH11, CCM12, CZF18, DV11, Fri19, HLTW19, LCY+11, LF12, LZ12, LOV10, MCV18, MD19, MFLY19, OG14, OO15a, RJKC16, SZC+13, VDB14, WLG+13, WTH15, XLL15]. **stuck** [GK11]. **studied** [GZL14, WXW14]. **studies** [CMJ+11, DGPOR18, HW11, MKR+12]. **study** [AS11a, AYDY11, BTM+17, CMRVVR+14, CB15b, CZ19, CB16b, CMR17, CRNK12, EY11, FDWC12, GLAC13, Gwi12, HCRD14, HST+11, HCC14, HML11, HB13, IUM13, JTN+11, JWL13, KBB+17, KV19, LLHC11, LRC+11, LQZ+13, LN16, lLsSZ14, LHSL14, LS11, LNSD15, LSD18, sLqSqL+13, LMAB16, MiH12, MPSV15, Miu11, NRSVW12, PBE14, RB18, SS18, SWL11, TG11, VEM12, ZDWY10, ZDD+13, dSF18]. **Studying** [YLYL17, AKZ+13, GTSL+13, HP11, KS19, LSDD14, Leó12, MFS10b, QDZ+13]. **Sturm** [LV10].

Sturmians [MCGR11]. **sub** [BHN+16, IBP+15, TIMM13]. **sub-** [BHN+16]. **sub-grid** [TIMM13]. **sub-stepping** [IBP+15]. **subdomains** [EDPZ19]. **subject** [PR13]. **submicron** [BHNS17]. **submicron-size** [BHNS17]. **subpixel** [HHC16]. **subroutine** [SFV19]. **subsequent** [KEH12]. **subsonic** [TKL+12]. **subspace** [BB15, BBF+10, BH11, BVSG19, LHJZ10, STK10, YRR13]. **substitution** [PdMML19]. **substrate** [EW16]. **substrates** [CLY11, EBCBG17, WTH15]. **substructure** [BJ14]. **subsystems** [Ano10n]. **subtract** [Sib17]. **subtract-with-borrow** [Sib17]. **subtraction** [AK13a, BWWM19, HMU10]. **successive** [BSM13]. **Sufficient** [MD11a]. **suitability** [JHH+19]. **suitable** [BW15]. **suite** [FBC+12, PVH+17]. **SUKI** [SKK+19]. **sum** [GJ13, WL11a]. **summation** [KK14b, KR16, LHZ11]. **SummerTime** [LM16]. **sums** [LM16, LNP+17]. **supercell** [Laz15]. **supercomputer** [GHdF10, Yi11, ZBN+19]. **supercomputers** [KCS+15, NB17, ZZG+16]. **supercomputing** [AGL11]. **superconducting** [CdFDS16, KA17, PMVG16]. **superconductor** [HBS+11]. **superconductors** [CMJ+11, OBM19]. **superfluid** [SQA+15, WFM14]. **supergravity** [Fis12]. **SuperIso** [AM10, AM11, AMR19]. **superlattices** [ACCB13, MiH12, RFSF18]. **SuperLFV** [Mur14]. **supernova** [BNAB11]. **supernovae** [CHA11]. **Superposition** [HD17, HCRD14]. **superpositions** [BS12]. **superpotential** [Sta10]. **superspace** [DF11b]. **Supersymmetric** [AB10, ABdA15, AC17, AMRdA17, AhPSV15, CJ12, CGV13, DET12, ES16, Mur14, SD15, Sta11, SOPS12]. **supersymmetry** [AKH12, AM10, AMR19, BBC+13a, BSW12]. **Support** [GBJ+15, LS15a, Smi16]. **Suppressing** [KÓG17]. **suppression** [GV15]. **supramolecular** [KBB+17]. **Surface** [GMH11, HJE+19, MGS13, AGVP10, ACMM10, BHW+12, CCD+16, CL11, CPR12, CB16b, Dan10a, Dan10b, Dan16, Dan17, FM15, Gai17, GZZ19, GSKM15, Kaw19, ML14, NEW+18, NLB+19, NS11b, PR10, PR12, RE19, RJLL16, SÓÓN11, TM14, TG11, XD16, ZPH+15, dSF18]. **surfaces** [ASPDL+16, BKN+17, Dan19, DR12, EBCB+14, EBCBG17, FGC+11, HS16, KC14, RFPM+17, SKML11, TKJ19, WS11a, XWF18, YLK10, Zhe15]. **surfactant** [ZKS+18]. **surfactants** [vdSM16]. **SURFF** [MB16]. **surrounded** [FM15]. **susceptibilities** [GTK+19a]. **susceptibility** [ZKW+15]. **SuSeFLAV** [CGV13]. **SusHi** [HLM13, HLM17]. **suspension** [TCCV18, vdS10]. **suspensions** [BE14, BHND16, DGPOR18, HPKF15, MDPTK15]. **SUSY** [ABH+18, Fon12, MZ14, Ros15, Sta14]. **SUSY_FLAVOR** [CRC+13, RCD+10]. **Susyno** [Fon12]. **SUSYQCD** [AMRdA17]. **Suzuki** [WC13, WC15]. **Swan** [HD11]. **Swarm** [PE17, GWF+16, GD14, SWL+15, YZZ+17]. **sweeping** [LHL11]. **Swendsen** [KO12, KO13, KO14b, Kom15a, Kom15b, Kom15c, KO16]. **switch** [UA17]. **switching** [PM14]. **SymbMat** [CK12]. **Symbolic** [Che17, CK12, GBD10, GDB10, LLL12, LLL13, Cri18, GBRB11, JC13, JC14,

KH10, Pan15, SZ15, Zit11, KDP+14, CCK23, Mel19]. **symbols** [Nik12b, Wei11a]. **Symmetric** [CFMR10, CYSL12, ACC17, CDMCN11, CFSK14, CLW11, GBRB11, GHMB+19, GCHL15, HC17, HM18, JOR+12, KSW12, MCP10, NLSJ17, PAS11, PS14, RS12, REBS16, SW12a, SW13b, Sza13b, Sza13a, SJY18, SJY20, TC12, Yua19]. **symmetric-** [SJY18, SJY20]. **symmetrical** [AAD14]. **symmetries** [JC13, JC14, VJC12]. **Symmetry** [MW14, Alv12, BCDP18, CDTV10, CFSK14, FF11, GNT17, HJL+14, LRC+11, ZAHA10]. **Symplectic** [LQ18, MKS10, Bla15, CWJ19, CFMR10, CZS10, CYSL12, HDZ14, KMS14, KZC+10, LS12a, LYL+17, QSC14, RHW+12, SSH+13, SW12a, SW13b, WXL13, WWHW14, WWC+16, XQ19, ZST11]. **SYMPLER** [KDP+14]. **synchronous** [BENK+17, Fer15, SCM13]. **synchrotron** [LSF14]. **synthesis** [LHWL16]. **Synthetic** [MGA+13, BL18b, KFF+16, PN15]. **System** [KBT+14, Ano11a, BMC+11a, BJBC+14, BCDP18, BHH+10, BBH+15, CDBM16, CFCB12, Cas12, Dat13, FBHB17, GZL14, GBP13, HAH13, HZ11, HLD13, JMG+17, Kro16, LDR+17, LL19, sL10, MD10a, MSI+10, MCAdF14, MSH11, OK10, ÖY13, PMMW15, SXW+18, TTG11, TTS11, TD17, WNYP17, mZfXL15]. **systematic** [BW16, BSK+18, ER19, GA13, MNL19, RCGT16]. **systems** [ÁSTT16, ÁSS18, AKR15, ABF19, ASPDL+16, AGH+16, ADdM+12b, ACDdM14, BMC+11b, DdJC+19, BFPP12, BBS14, BKS15, Bis15, BVC13, BMW14, BC11, CR13, CLH+17, CGM17, CZ18b, CLJ12, CYSL12, CSK+19, CL15b, CB15d, CB16a, CR12, CBB+10, CFFR15, Dan14, Dan16, Dan17, Dan19, DBJ11, DEW16, Er14, Ert15, FLW10, Fil14, FE11, FLW17, GLHR19, GJ18a, GS17a, GH11, GM16, GBJ+10, GBJ+12, GBJ+13, GCHL15, HBL+13, HL19a, HAN+16, IUM13, JLA+14, JWC18, JXTS16, JLW13, JNN12, JNN13, JGC+11, KFS17, Kau13, KPA13, KHZ+18, KI11, KO12, KS12, KPOR18, KGNS10, LLQX19, LKM+16, LCY+11, Leó12, LRW+15, LWYW11, LS16, LB10a, LB13, LKT+16, LCHM10, LL12, LCHM13, LBP15, MPM14, MFM15, Men11, MGS13, Miy15, NFD+19, PFA+15, PTMDPK14, PLCC12, QZWU19, RF10, RAV11, RHC15, RCH16, RCH19]. **systems** [RLMGM+11, SW14b, SL17, SH18, SCJH19, SEGP15, SGW17, SLR16, SS10a, SPP19, TM14, TDL+14, UO15b, UO15a, Voy13, VBMP15, VB19, Vuk12, WXL13, WRB11, WAW14, WYSW10, WW10, YZWR14, ZAHA10, dB14]. **SYVA** [GNT17].

T [CCK23, HD17, PC11, NDSH18, MB16, KB19]. **T-matrix** [HD17]. **t-SURFF** [MB16]. **T3PS** [Mau16]. **table** [JTH14, LYJY10, Wei11a, vSGB+18]. **tackle** [CKS10]. **tadpoles** [Pik18]. **tag** [DKT14, HLS12]. **tag-mediated** [HLS12]. **tailored** [VvAV+11b]. **tangents** [PR10, PR12]. **Target** [DAW+19, GC13, HHT14, RtV16, SKK+19]. **targets** [BAK+17, HC16, LHJ+15, MSR+17, SMOB19]. **Tartarus** [SGSG19]. **task** [TGH+16]. **task-based** [TGH+16]. **tasks** [HWT10]. **tau** [SW14c, Wan10a, HTT13, HTT14]. **TAUOLA** [CPWZ18, DNP+12]. **Taylor**

[WG12]. **TaylUR** [vH10]. **TD** [HM17]. **TD-DFT** [HM17]. **TDDFT** [PVK+18, PUO14]. **TDDS** [GLHR19]. **TDF** [SGDS16]. **TDHF** [MRSU14, SRS+18]. **TDSE** [FZY17, ÓN14]. **TE** [LS17b, LSSW14]. **tearing** [HSK+12]. **Technical** [DNP+12, DPW16, LS15a]. **technique** [BALV16, BCDP18, CS10, DG10a, DG10b, DM17, Eba13, EKDGG15, GHvdL11, GGG16, GTS14, Hon10, JAS17, KN13, Koh15, KR16, LLX14b, NPAD11, NDSH18, NVAFO18, QZ19, Ram10, SK14, TH17, VDB14, WLS13, WDR16, MAIVAH14]. **techniques** [BCS10, BD12, BJM15, BVSG19, BSW12, GSB+14, JZJ18, KHKR14, LAG+17, MIW+13, MC12, MHWH19, OBH10, PLF+17, RGH10, RWKS15, WMI19, ZWC+19]. **technological** [CMdB11]. **technology** [DM12, MSI+10, MRL19, RB18]. **telegraph** [PKT15, XYK12]. **telescope** [ECD+10]. **tell** [KSL+11]. **TEM** [KQYH17]. **Temperature** [HST+11, HEF+11, OBM19, BM16, CM10a, GB14, HvWT17, Hin11, KST14a, KCT15, KA17, KGNS10, Liu13, LK15, Liu15a, LJD+19, Mil16, RF16, SLK19, SLC11, SC15, SC16b, SPSP18, VdLF14]. **Temperature-controlled** [HST+11]. **temperature-dependent** [SLC11]. **temperatures** [Wai12]. **tempering** [Boe14, FFT+14, JJ15, VdLF14, VDF15]. **Template** [LHL11, BJ14]. **TemplateTagger** [BJ14]. **Temporal** [MDF11, SCB+17a, YHCS11, IBP+15, KEH12]. **TENO** [Fu19a, Fu19b]. **tensile** [SCM+18]. **Tension** [RM10a, DIR+19]. **Tensor** [SPS18, BK12, Bre10, DKOS14, DLW+18, GCH+18, HR11, KAK12, KK14b, KK14a, KCA+15, Lya15, MK19, NKS15, Nie18, PGO17]. **Tensors** [Dep17, Ara14a, Ara14b]. **term** [Pla16]. **terms** [ACMM10, ACML11, ACM12, Deg15, HMU10, LNP+17, MSR10]. **ternary** [Sza16]. **terrain** [OAKS11]. **TERS** [Nat10, Nat09]. **Tersoff** [Ngu17]. **Tesla** [Lya15, AAA+16]. **Tessellation** [CMSN18]. **tessellations** [SOJ14]. **Test** [LNSD15, PBE14, SISW10, TdAdSS11, VEM12, ZZG+16]. **test-kinetic** [VEM12]. **TESTER** [DGPW11]. **Testing** [ES11, FMRP16, Pit10, Liu11, MGFRG12, TVT+16, Zlo14]. **Tests** [SMJ17, Gag12b, Gag12a, GH18]. **tetrahedral** [JG16]. **tetrahedron** [GJ18b, Kap12a]. **tetrahedron-based** [GJ18b]. **Tevatron** [BBH+10, BBH+11a]. **TFmix** [SLK19]. **Th** [CHW+15, GJ14]. **th-order** [GJ14]. **their** [BDJS18, GSMK17, GCVA14b, KAR+15]. **theoretic** [SSBS15]. **Theoretical** [HCC14, LQZ+13, NS11b, NVW+13, Sit18]. **theories** [ADF+15, CJ12, Cip11, Fri14a, LM19, LSSW14, SA14]. **Theory** [GS17a, VCMS+13, ZZH+16, ASA18, ADT+19, BPC12, BB13a, BW12a, BG11, BO12, BRH+16, CXH+15, CKhN11, Chr18, CZ19, Cri18, DF13, FK15, GWL+17, GTK+19a, GBR+14, HAH13, Hsu11b, HHS+10, JCW+13, KBB+17, KVW11, KBSP19, KPST15, Kra17, Kra18a, LA13, LSDD14, LWES18, LSK+14, MGRB11, MBF+10, MOB12, MSS+16, MG10a, Mül11a, MC17, Naz12, NRSVW12, Nut14, OOK+12, OT11, Pre18, QJF16, RWKS15, San15, SD15, SCRS17, SSH16, SBH+12, SÜ18, TVGB15, VBS+17, WHG+19, Wan10b, WM13, YZWR14, YLYL17, ZAHA10, BK13b, BC10, DBB12, GS17b, LT15]. **thermal** [CCXC15, DS13b, FSH13, Fow18, FM15, GM14, TKP12, Wan16,

YK18, CKFB12, VS19b]. **Thermal-FIST** [VS19b]. **thermal-hydraulics** [YLL+19]. **thermally** [CZN14]. **THERMINATOR** [CKFB12]. **thermo** [DGMZ15]. **thermo-mechanical** [DGMZ15]. **thermochemistry** [YFAT17]. **thermodynamic** [BSWC14, Cou13a, Cou13b, DES+11, GRR+14, MJB11, RKGC+17, TDL+14, ZZH+16]. **thermodynamics** [AGVP10, Fri17, KH10, MWL+10, dlRAPL11]. **Thermoelectric** [BKA+14, KAR+15, NVAFO18, PVK+14a, PVK+14b]. **thermostat** [GJHF14, JBKM15]. **Thermostatistical** [GM11]. **thermostatistics** [AMR15]. **Thick** [SMUT19]. **Thick-restart** [SMUT19]. **thickness** [CDSG11]. **thin** [BL14]. **Third** [MAM14, NS15, VEB+18]. **Thomas** [GLHR19, SLK19]. **Thouless** [RMC16]. **threads** [CUL+17, sLqSqL+13]. **Three** [BY13, CW16, dAFdSVM12, HWS16, LJSW11, LB13, MNPF17, SC15, WWC+16, YWX11, ABB+16, BC11, BKM14, BK16b, CS16, DS13c, DMC10, DO14b, EKO16, Exl17, FFT+14, GTPWL12, GBD10, GSMK17, HLW16, HLTW19, HCSW10, Ixa16, JWCW17, KKP11, KP12b, KH12, KRB15, KKO19, LA13, LLXK16, LCQF18, MÅWK18, PBE14, Qia16, RWKS15, SFP11, SCLW16, SC16b, TSIM16, Ume18, WL11b, XZF12, ZFH14, ZZG+16]. **three-** [GSMK17]. **Three-body** [BY13, LB13, EKO16, Ixa16]. **Three-dimensional** [CW16, dAFdSVM12, LJSW11, MNPF17, WWC+16, BC11, DS13c, DO14b, FFT+14, GTPWL12, HLTW19, HCSW10, KKP11, KP12b, KH12, KRB15, KKO19, LLXK16, LCQF18, Qia16, RWKS15, SFP11, SCLW16, XZF12]. **three-level** [WL11b]. **three-nucleon** [GBD10]. **three-state** [XZF12]. **three-step** [Ume18]. **Three-temperature** [SC15, SC16b]. **threshold** [BH17, BKMP16, Has11, HST+11, dSdO12]. **throttling** [DSHS17]. **throughput** [ECD+10, ZZ17a, ZFZ19]. **THz** [WQ18]. **Ti** [Ell17b]. **TIERRAS** [TS10]. **TIGER2** [BW15, MPB10]. **tight** [HSF+19, HM17, Jac19, RJKC16, SHNM11, YLYL17, LSK+14]. **tight-binding** [HSF+19, HM17, Jac19, RJKC16, YLYL17]. **TIM** [LHC+12, OTC14]. **Time** [DAW+19, GTG+11, HKF+12, IBB18, LLQX19, LB10b, RJKC16, TD14, TC11b, TT11, AAA+16, ADdM16a, ADdM17, Ano19m, ABDR17, AH13, BS15a, BR14, BD10, BMBC+17, BB12, BENK+17, CZ18a, CMSN18, CVK+17, CC10a, CH19, CKSM+19, CDL+12, CW16, CZZ+19, CYOS19, Chr18, CHZ18, CO11, DS13a, DS10, DM17, DV11, DSW+15a, DKSG16, DHR14, DJ14, DM12, ECD+10, FDZ17, FGLB12, FNPMB10, Fri10, GS15, GMPFC+14, GML15, GBR+14, GM16, GVR19, GBSY18, GJHF14, GWF+11, GMHZ19, HE13, HWG13, Has11, HC16, HLLH16, HC17, HL19a, HKvH16, Hsu11b, HHC+10, HWM+15, Hua17, HM18, IW15, JLM18, Jia18, JL19, JHJG14, JMG+17, KK16b, KBSP19, KYSV+15, KSY17, LLHC11, LV14, LS15b, LLP15, LTP+17, LAS+17, LBB+16, LYSS+16, LR13, LR16, MWI+19, MC16, MGRB11, MGL16, MC10, MBFD12, ICD13]. **time** [MC17, NPM16, NAQ16, ÓN12, PSB11, PSBT12, PM16, PVK+18, PTMDPK14, PBS+17, QYM11, QA13a, QWZW18, RE19, Ram14, RVDS16,

RDVS18, SHT18, SSB+16, SLY18, SKFP16, SVV19, SSH+13, SGW17, SBPD19, SBH+12, SCB17b, SW12b, TTG11, TL17, TT14, TVT+16, TVGB15, UW12, US16, VDB14, VBS+17, VVB+12, Vuk12, WL11b, WMI19, YOM+19, YSVM+16, YSMA+17, YWOD19, ZD15, ZYZ15, ZY19a, dSF18, dHGCS11, CYN19, Wil19]. **time-delay** [DS10, LTP+17]. **time-delayed** [JHJG14]. **Time-Dependent** [LB10b, GTG+11, IBB18, TC11b, TT11, BMBC+17, DS13a, DHR14, DM12, FGLB12, GS15, GBR+14, HM18, JL19, KBSP19, KYSV+15, LV14, LBB+16, LYSS+16, MC16, MGRB11, MGL16, MC17, NPM16, ÓN12, PM16, SSB+16, SSH+13, SCB17b, TVGB15, UW12, VBS+17, VVB+12, WL11b, YSVM+16, YSMA+17, ZYZ15, dSF18]. **Time-domain** [LLQX19, CKSM+19, CW16, FNPMB10, HE13, HC16, HC17, HKvH16, MBFD12, ICD13, SVV19, SW12b, TT14, VDB14, Wil19]. **Time-efficient** [RJKC16]. **time-evolution** [JMG+17]. **time-evolving** [US16]. **time-fractional** [CZZ+19, GMHZ19]. **time-harmonic** [HLLH16, LLP15, TVT+16]. **time-integration** [CH19]. **time-modulated** [TTG11]. **time-spectral** [SLY18]. **Time-splitting** [TD14, BB12, GML15]. **time-step** [LS15b]. **time-stepping** [DJ14, QWZW18, SHT18, WMI19]. **TIMEDELn** [LTP+17]. **times** [VKLM11]. **timeseries** [HBP14]. **TimeSeriesStreaming.vi** [CO11]. **timesteps** [YQM12, YQM14]. **Timing** [SJW10]. **tin** [LZP12]. **TINKER** [BBL+13]. **tip** [XLX+15]. **TNAMD** [MPB10]. **TNSPackage** [DLW+18]. **tokamak** [Ano10n, ALC18, BSM13, BMU11, BT17b, BB13b, FBHB17, GGI+13, HV15, HAK+14, HF16, JHL+15, KYKN15a, KYKN15b, KGG+16, KQYH17, LDR+17, LRK13, OILK17, PHT+19, PMS+17, PS11, YLKN17, ZFR18, SM13]. **tokamaks** [ML17, PPV+11, TJH17]. **TOMBO** [ONS+15]. **Tomlinson** [AMM11]. **tomographic** [HZC19, YvOSM15]. **tomography** [AGMS15, CM10b, DADS11, FWS+17, LM12, MD11b, PR10, PR12, SSM+17, YvOSM15]. **Tool** [BCTP18, Mau16, Ruf13, SF10, BJ14, BM19, BCH17, Bre10, BHW+12, CF16, CKS10, CC19, CRC+13, CZN14, DGPW11, DES+11, DRR15, EBDM17, FYK18, FCC15, Gio14a, GM17, GRR+14, GPS+13, GBC+18, GFB+10, GGF+13, HD11, Hir15, HB13, KS19, KFS+13, Kol15, KRB19, LCE+13, LHL11, LS17b, MLGVE14, MVI+16, MNPY14, MYP+14, MG10a, Mül11a, Mur14, NRSVW12, OG14, OO15b, OO15a, OVSI15, OAKS11, PSMS14, PSMS15, PG19, Pra17, RF15, RJW+19, RCD+10, Ros15, RKGC+17, Rut18, SGDS16, SZC+13, SPY11, SOPS12, Sta14, TKS19, WS11b, sX19, YOM+19, YB13, BBB+15]. **toolbox** [ACD+14b, AD14, AD15, Bal19, BHJ+18, DSK19, HT12, Hoh14a, Hoh14b, Hoh18, HSF+15, Men11, PFA+15, TACA15, VDAH16, WJCZ18, WTH15]. **toolkit** [BG19a, BG19b, BMZ+18, HWM+15, Hua17, Liu15b, Pei18, SBH+14, SMO16b, WFDK19, Wie18]. **Tools** [GHdF10, GHvSF14, ABB+14, Ano10o, CFW17, Fis12, Fri14b, LHGF18, MFS10b, SLW19a, SLW19b, SS13c, VKS16]. **Top** [ALL+11, CFSK14, CM14b, HLM17, KKK+15, ZZG+16, CM14b]. **top-pair** [CM14b]. **top-quark** [KKK+15]. **topological** [BLS17, FWZ+12, WZS+18]. **topologies** [ABB+16, BCM+16]. **Topology**

[BBO19, LRR+17]. **Topology-based** [BBO19]. **tops** [MNV13, SJY18, SJY20]. **TORBEAM** [PBL+18]. **torch** [CLW11]. **toroidal** [BDBV12, DXY+19, HKJ+12, JGC+11, KTE+12, LC15, MJB+10, PCGM14]. **Torricelli** [BMF+19]. **torsional** [FCCTFR18, ZMCT12, ZMPT13]. **torsions** [FCCTFR18]. **torus** [KGG+16, YKK+19]. **Total** [TAFD19, KCA+15, MKU+12, SAA+10, SGDS16, SSM+17]. **toy** [GFJ+14]. **toy-model** [GFJ+14]. **trace** [SK12]. **tracer** [OTC14, WLQ+17]. **tracing** [CMS17, KMA+12, LHC+12, LHL16, MTM14, MMC10, MCAdF14, Mül14a, PBL+18, TZK16, VLZ17]. **track** [AANAJ12, BPMM14, BKM11, JuIAM16, LFG14, MSNI11, SMCB+15, VSG17, AKKK16]. **TrackEtching** [VSG17]. **Tracking** [KL14, RNdB19, AGMS15, BKM11, BY17, CNS+18, CWY+17, KSW12, LQ18, ZSW+17a]. **tracks** [Eme11, KEH12]. **tract** [CPCDdM18]. **tractable** [Brá15, Deu16]. **trade** [CLLK11, NBN+14]. **trade-offs** [NBN+14]. **traffic** [JHJG14, Kom15b, SDJ+12, SJW10]. **train** [DKOS14]. **Training** [vSGB+18, LYJH19]. **trajectography** [Mag18]. **trajectories** [Bin13, DRR15, KI11, KS15, LS12b]. **trajectory** [DAW+19, TS11, Wil15]. **Transfer** [Hak16, Hak19, Lee18, TRN16, ZLL18, ASS13, BBB17b, CLJ12, CZF18, DBMR18, ELDS14, Gai17, GZL14, HTT13, HTT14, IBB18, MR14, NBM+15, NCHN15, NFI17, NGCI+12, STT11, SR12, XHLUF+18]. **transferable** [HBP+15]. **transferred** [CLW11]. **transform** [Jan10, KT10, sLqSqL+13, Ras09, Ras17, Ser17, TO10a, WLG+13, XGH+19, FCC15]. **transformation** [BMNS14, GKM10, GSMK17, Mey18, MGK13, OK14, SMGK14, SCG11, JLW13]. **transformations** [Che17, Mel19, MWCY14]. **transformed** [PSL+17, SSK+13]. **transforms** [GMF+17, SPS10, SBvD13]. **Transient** [NB17, CAN11, CCXC15, CB15b, GTSL+13, MK10, QWZW18, RJLL16, WNYP17]. **transiesta** [PLF+17]. **Transition** [BP12, BR13, KBLJ18, LA13, BM19, BL14, CK12, DSHS17, Fri12, HW11, KA17, LRC+11, MTS+16, NFI17, RMC16, RE12, SLZ16, SV12, Wai12, WJHW14]. **Transition-path** [LA13]. **Transitions** [BM19, ABB+19, BUJ15, CMR17, JJB11, KPA13, Ots11, QDZ+13, RAV11, VDF15]. **translation** [TSIM16]. **translational** [CATK11]. **translationally** [SMGK19]. **translocation** [KSH11, dHGCS11]. **transmission** [GCVA14a, HTT13, HTT14, MD10a, PYW+14, SVGS18, WHB16]. **transmutation** [CLF18]. **transparency** [WL11b]. **Transparent** [NPM16, SP18a]. **Transport** [BNPPD19, CP15b, VC10, ASPDL+16, BDPM15, BTL+17, CVK+17, CCXC15, CXG+19, CAGL13, DSP15, EY11, FUSH14, FVH18, FZ16, FLSZ13, FRFH10, FR15, FM15, GZL14, GLHG12, HBE10, HCC14, HF16, Ihn12, Jab19, JA17, JL19, KLKR11, KYKN15a, KYKN15b, KPK+17, KKS18, LLE+18, LCKM14, LRK13, MD11a, MCV18, Mar15, MS14, NPM16, NBCL18, OBH10, PPV+11, PLF+17, PMS+17, PBF+16, PFFK19, PVK+14a, PVK+14b, PMVG16, RF16, RDC+18, RNdB19, RB18, SL16, SISW10, SCJH19, SK12, SD14, SCW+11, SSF+14, SC15, SC16b, Tic10, Tic14, WRFS15, XJS16, YSN+14, ZFR18, VFV19]. **transpose** [Lya15]. **transverse** [CC19, MSH11, Qia17]. **trap**

[BDP16, KYSV+15, LBB+16, SSB+16, VVB+12, YSVM+16]. **trapping** [JA17]. **traveling** [sL10]. **TRAVIS** [MTM14]. **treat** [FCCTFR18]. **treatment** [BKC+17, FZR19, Fuh15, KPPC13, MCNRC16, NMCR15, dlRL11, SM11, TC11b]. **tree** [ACD+14b, FSF11, KPVvdH13, WISA11, WSH+12, YZWR14]. **tree-level** [ACD+14b]. **trees** [NCHN15]. **Trends** [AGL11]. **TRHD** [SC15, SC16b]. **trial** [BMW14]. **triangular** [CCLL18, HML11, MH11]. **triangulation** [GMH11, Zhe15]. **triangulations** [CHNS18]. **triatomic** [AV13]. **triaxial** [MAM14, MAM14]. **tribological** [EVB14]. **trick** [WW12]. **tricritical** [dSFdFF13]. **tridiagonal** [LW14a, LWW10]. **trigger** [Dim14, Ano19m]. **Trigonometrically** [YZZ11, DMP18, KMS14, RVA14]. **Trigonometrically-fitted** [YZZ11, RVA14]. **triple** [RMW13]. **triple-correlation** [RMW13]. **triply** [YLK10]. **TRIQS** [APS+16, KH19, PFA+15, SKFP16]. **TRIQS/CTHYB** [SKFP16]. **TRIQS/DFTTools** [APS+16]. **TRIQS/SOM** [KH19]. **trivializing** [ES11]. **TRolke** [LCRL10]. **Trotter** [WC13, WC15]. **true** [LSK+13]. **true-direction** [LSK+13]. **truly** [Mis12, Mis13, RH17]. **truncated** [GWF+16]. **truncating** [BL14]. **truncation** [KN13]. **tubes** [Sza16]. **tumor** [LRSS19]. **tunable** [MFLY19, TMA+15]. **Tuning** [BMDP19]. **tunnel** [CAGL13]. **Tunneling** [MAC12, Raw16, YSN+14]. **turbid** [LN16]. **turboEELS** [TVGB15]. **turboTDDFT** [GBR+14, MGRB11]. **turbulence** [BY17, DXY+19, DCM+12, Fu19b, GAB+16, HO13, JHL+15, KTE+12, KQYH17, MMO+17, SNB11, THDH14, TIMM13, Uty14, YBNY13, ZW15, ZFR18]. **turbulent** [APC+14, BCM+16, CBGY17, CBYG18, JU17, Kra18b, Les16, LWJV18, ML16, PN15, Tau10, VK16, WMI19, ZPS+18, ZBN+19]. **TVD** [Yua19]. **Tweezers** [BGL+14, BMG+15, Ost10]. **TweezPal** [Ost10]. **Twenty** [DKMS19]. **twisted** [ABF19, BBC+11, BMHP17, CZ19, LS13]. **twisted-mass** [LS13]. **Two** [BBPS15, CCW10, KV10a, LWYW11, MKL17, Ore19, PMMF15, RS12, SVV19, THJ+10, VK14, dSdO12, AMRdA17, AG12b, ALA+19, AH13, AM17, BKS15, BH13, BIT12, BK15, CAN11, CS16, CCK23, CC10b, CC12, CDS+13b, CS10, CHZ18, Dan14, Dan16, Dan17, Dan19, DG10b, DS11b, DN13, Dev12, DT18, DKT14, Eba13, ERS10c, ERS10a, ERS10b, Erm18, FS17, FGR14, FEH11, FKS+19, Gag12a, GDB10, GH11, GC10, GC16, GCK19, GLW14, HEF12, HKK11, JEFP14, JWC13, JH15, JPM12, KS16a, KK14a, Ki10, KYKN15a, KYKN15b, KAvdL11, KTE+12, KO12, KO13, LOL+18, LA13, LSDD14, Laz15, LW14a, LLSK17, LST15, LXR+18, LHH+12b, LJZ+18, LB10a, LY16, LR13, LR16, LS17b, ML17, MH18, MSZW11, NS15, OAKS11, PZZL19, PP13, QLE16, QSB19, RVA14, RCH19, SYD17, Sie16, SLR16, SQA+15]. **two** [SW12b, SS10b, SDJ+12, SJW10, TZM17, TBZ12, TT14, VvAV+11b, VS19a, WHG+19, XZ12, YÇÖ15, YZZ11, YdDH+12, ZLM12, mZfXL15, ZHC16, ZFR18, dTOV18]. **two-body** [FEH11, HEF12, LSDD14, VvAV+11b]. **two-center** [DT18]. **two-color** [HKK11]. **two-component** [Eba13, Erm18, TZM17]. **two-dimension** [LXR+18]. **Two-dimensional**

[VK14, AH13, CAN11, CC10b, CC12, CHZ18, Dan14, Dan16, Dan17, Dan19, DG10b, DS11b, JEFP14, JPM12, KS16a, KYKN15b, KO12, KO13, LLSK17, LST15, LHH+12b, LR13, LR16, MSZW11, QSB19, SLR16, SDJ+12, SJW10, TT14, XZ12, dTOV18]. **two-electron** [AG12b, GH11, JH15, KK14a, LB10a, YÇÖ15]. **two-flavor** [CDS+13b]. **two-fluid** [ALA+19, KTE+12, LOL+18, ML17, SQA+15, ZFR18]. **Two-grid** [KV10a]. **Two-Higgs-Doublet** [Ore19, ERS10c, ERS10a, ERS10b]. **two-layer** [GLW14]. **two-layered** [PP13]. **two-level** [BKS15, LW14a, LY16, ZHC16]. **two-loop** [AMRdA17, BH13, LS17b, YdDH+12]. **two-parameter** [JWC13]. **two-particle** [Dev12, MH18, WHG+19]. **two-phase** [FKS+19, Ki10, SYD17, Sie16, VS19a]. **two-photon** [DKT14, ZLM12]. **two-point** [CS10]. **two-power** [SW12b]. **two-route** [mZfXL15]. **Two-stage** [CCW10, PZZL19]. **Two-step** [LWYW11, SVV19, BIT12, FGR14, NS15, SS10b, YZZ11]. **Two-way** [MKL17, OAKS11]. **type** [BCC+18, BKOZ16, BKM14, BK15, CB13b, CCGC13, Ert15, FMW10, FG13, FPY+17, Giu19, HF16, HBS+11, IUM13, KBSP12, MNOØ11, NS15, PPY14, PKT15, PDRG10, RJW+19, SLZ16, TL17, WFV14, Wu10, WL11b, YWYF09, SAS11, MWCY14]. **type-II** [HBS+11, SAS11].

U [CHW+15]. **uasiparticle** [SKB10]. **UCL** [CYD11]. **udkm1Dsim** [SBH+14]. **udocker** [GBC+18]. **UFO** [DDF+12, Sta13]. **ultra** [HEPW13, KVV19, KNS+17, QYM11, TIM+16]. **ultra-high** [HEPW13, KVV19]. **ultra-large-scale** [TIM+16]. **ultra-peripheral** [KNS+17]. **ultra-relativistic** [QYM11]. **ultracold** [BG11, SJHS19]. **ultrafast** [FWS+17, NFI17, SBH+14]. **Ultrahigh** [VV18]. **Ultrahigh-order** [VV18]. **ultrashort** [GC12]. **ultrashort-pulsed** [GC12]. **ultrasonic** [RLMGM+11]. **umbrella** [IIO16, IFOI18]. **UmUTracker** [ZSW+17a]. **unbounded** [Exl17, GMHZ19]. **uncertain** [ÁSS18, MCL+17]. **Uncertainty** [CNS+14, CC16, HHM+15, KKK+15, KZ14, LCRL10, LLX14a]. **Unconditionally** [Ram14, ZY19a]. **under-ice** [TS10]. **under-saturated** [JHJG14]. **underground** [TS10]. **underwater** [TS10]. **undirected** [FLP10]. **UNEDF** [BBC+13b]. **Unfolding** [ZZD15, ZZ17b, ZZ17b]. **unification** [ABdA15]. **Unified** [DE13, Ram12, Wei99, CSC11, CSJ+17, KEH12, MRVF13, RHW+12, Sch14a, SK12, sX19, YK18, zYCG+18, MW19]. **uniform** [BDP16, CDMCN11, GBN17, KS15, LA13, LFG14, PdMML19, Ser10, Ser17, Wit14, YQM12, YQM14]. **uniformly** [Gwi12, SKK11]. **union** [TMS19]. **union-find** [TMS19]. **Unique** [WLG+13]. **UNIST** [LLE+18]. **unit** [Laz15, MEM+11, RC18, Tic10, MSML10, YLO13]. **Units** [Boe18, APRG11, BK11a, BHS18, BJCW13, CDS13a, Col14, DBDP12, DS11a, DF13, FSH13, FUSH14, FCVH17, FVH18, Fil14, FZY13, HAN+16, LAS+17, MED11, NPAG11, PLD+13, SH12b, TD11, WDL11, WWFT11, Dem11]. **Universal** [CCWL11, DNP+12, BDDM18, DGPW11, EGPS10, GGI+13,

KRM+19, SJ11, DDF+12]. **Universality** [Fri10, PM13]. **unknown** [PR13]. **unknowns** [YBK+11]. **unparticles** [AAB+10b]. **unsaturated** [GTSL+13]. **Unsteady** [FJK+17, SL14, TY10, Tia11, TCP13, TPC16, Uty14]. **unstructured**
[ASGLK10, AK15, ALA+19, Cha19, GLHG12, HWCdM19, LYP14, LJWK11, LWRQ16, MTO15, OCM+19, PZZL19, PBD+15, SP18b, SC15, ZS13]. **unstructured-grids** [SC15]. **unweighted**
[Gag12b, Gag12a, GH18, GHN19, WW12]. **Update**
[ABB+14, CYD11, KT10, AMJ18, BCMS10, CK19, GSMK17, HJGL18, HJGL19, NM14, TJD11, Tab16, Tom16]. **Updated**
[GAC+17, Hol19, KKK+15, Cip11, LCE+13, LW16, MBGK11, MYP+14, MG10b, PVK+14b, SZY+12, SZY+13]. **updates** [LS15a]. **upgrade** [Dan11]. **upgraded** [AMR+18, CWW10, CWW15, OKP10, Sha16, ZYL+15]. **upper** [CPCDdM18]. **Uquantchem** [Sou14]. **use**
[ERPDFLS15, KAR+15, Kom15a, LCJ10, MNV13, Sou14, ZDWM17]. **Useful** [Bar11b, HWCdM19]. **user**
[AKK+18, BBG+13, CFS13, GLR17, GBC+18, RFPM+17]. **user-friendly** [CFS13, RFPM+17]. **uses** [CEPI10]. **Using**
[BS14a, CSRV13, RMC16, AM14b, APRG11, ACD+14a, AGMS15, Ano20, ALC18, Asc10, AH13, APC+14, AAJA14, BMC+11a, BSM13, BdVGS11, BH14b, BL18a, BD10, BKM11, BCM+16, BTC+17, BVSG19, BGHN19, BY17, BSW12, BMDP19, CKLM10, CCLL18, CL15a, Cap13, CHNS18, CB13b, CAN11, CC16, CMSV14, CSP+19, CDS+13b, CKK+13, Cip11, CBB+10, CBYG18, CH11b, CBB14, CB16b, CL13, CLB11, CRNK12, CMS17, DXY+19, DM17, Dem13, DRUE12, DKOS14, DM12, EDPZ19, Ein16b, EKDGG15, FJK+17, FDWC12, FNPMB10, FWS+17, FZY13, GBP13, GSMK17, GA10, GSB+14, Gor19, GMH11, GYW+10, GM18, GRTZ10, HTJ+16, HCC14, HAN+16, HHC16, HZC19, HKK11, Ihn12, JK13, JU17, JSLM16, KK16a, KH11, KTB17, KK14a, KD17, KKP11, KMM+19, KN13, Koh15, KS12, KKS18, KST+14b, KHKR14, KCS+15, LLHC11, LD10b, LA13]. **using** [LBM+14, LOK+16, LWZ14, LYX+17, LXR+18, LHH+12b, LS12b, LTP+17, LAS+17, LNSD15, LHGF18, LWP+17, LRSS19, MED11, MGRB11, MHV17, MP11, MSI+10, MRVF13, Maź19, MC12, MVI+16, Mis12, MM10, MSML10, MLK+17, MLK+19, MGR16, MSS+14, NGM+10, OBH10, OKM12, OYK+14, PSBT12, PPV+11, PDRG10, PVK+17, PDL+18, PSL+17, PR10, PR12, PCEH15, PMVG16, PA13, RE19, RDP14, RMS+12, RLMGM+11, SCB+17a, SAW18, SEW12, SEW14, SÓÓN11, SW14c, SWL+15, SPMM11, SD10b, SA15b, SLR+11, SSF+14, Sie16, SC15, SN16, SPS10, SKH+10, SHL+11, SBH+12, SS10a, SOYHDD19, SSK+13, TOB+14, TVGB15, TW15, TCP13, UBRT10, VSO+13, VDA+19, VvAV+11a, VJC12, WISA11, WW15, WLG+13, WAHL13, WMRR17, WRMR19, WFV14, WAW14, XHLUF+18, XLX+15, XYZX19, YZ16, YK10, Yi11, YBK+11, YBNY13, YE14a, YB13, YXT+15, YG12, ZBG+16]. **using**
[ZDWY10, ZKG+18, ZMvE+13, dJBIM16, VFV19]. **USPEX** [LOSZ13].

utilitarian [BC19, CB15a, CB17]. **utilization** [sLqSqL+13, SMCB+15]. **UV** [Deg15, Fen12b, dDYK+18]. **UV-divergent** [Fen12b, dDYK+18].

V [Maź19, DGPW11, LS11, RF10]. **v.2** [JPSS10]. **v.3** [MNL19]. **v0.7** [Hua17]. **v03** [GBJ+13]. **v04** [GES13]. **v05** [GFJ+14]. **v05-Implementation** [GFJ+14]. **v1.0** [GTK+19a, HM12a, LKPH19, Mau16]. **v1.0.0** [BJ14]. **v1.01** [BS13b]. **v1.02** [CDTV10]. **v1.1** [AKK+18]. **v1.3** [LW16]. **v2** [CRC+13]. **v2.0** [Nat10, HAV+14, Nat09]. **v2.00d** [SSK+13]. **v2.49t** [SDM+12]. **v2.5** [Ros15]. **v2.73y** [SDS+17]. **v3** [HCM19]. **v3.0** [AM11]. **v3.00** [PSL+17]. **v4** [AMR19]. **vacancies** [DBJ11, PLD15]. **vacancy** [ZY19a]. **VACTIV** [Zlo13]. **vacuum** [PS11]. **vadose** [Org15]. **valence** [MCA17]. **validate** [Fis12]. **validated** [EZL+16, JTH14]. **validation** [CPW17, HLL13, OBM19, YG12]. **validity** [Liu11]. **valley** [LHL16]. **value** [CS10, GWF+16, GN14, Jan10, KAS12, LX12, LW14b, SS13b, SK14, SS10b, ZWLZ17, ZX10, ZLL13, BBV10, YZ16]. **valued** [KL17, LK12]. **values** [Wie13]. **Vanadium** [LS11]. **vanished** [NS15]. **Vanka** [BKOZ16]. **Vanka-type** [BKOZ16]. **vapor** [PBF+16]. **variability** [PPS10]. **Variable** [KMS19, QDZ+13, BL19, BDV11, DT10, GZW17, LZZL10, MMY+19, Moh14, OAKS11, PKT15, SL17, TK14b]. **variable-density** [BL19]. **Variable-step-length** [KMS19]. **variables** [BKM14, BK15, BK16b, CM10a, GLR17, Gio18, KTA12, Mar15, RE19, SK10]. **Variance** [EPS15, ICPD16, SAA+10, GSB+14, HLL13, WLS13]. **Variance-based** [ICPD16, WLS13]. **variances** [BMDP19]. **variant** [MN10]. **variate** [KHK+11, MS14]. **variates** [Rom15]. **variation** [MKU+12]. **Variational** [VvAV+11a, ZX10, BLV+19, HM18, MMY+19, Miu11, VvAV+11b, ZOZ13]. **variations** [McM17, PR12, VV16]. **varied** [YLYL17]. **varint** [CMSV14]. **various** [AC16, Hol19]. **vascular** [GVR19]. **VASP** [DA16, HW12, MDGC+12]. **vdW** [LAA+10]. **vector** [BW11, DDKM15, FBHB17, GJ18a, GMHZ19, GNT17, KYKN15a, KYKN15b, KL17, LK12, LHJZ10, ME18, PDL+18, QM10, SAHP15, SBQ14]. **vector-boson** [DDKM15]. **vector-valued** [KL17, LK12]. **vectorisation** [TH17]. **vectorization** [SAN18, WN19]. **Vectorized** [RMW13, TGH+16]. **vectors** [ERPDFLS15, FBG10, YE14a]. **Vekilov** [Maź19]. **velocimetry** [AGMS15, iSSMI11]. **velocities** [JC16, MSHLS15, MSHL17]. **Velocity** [PVK+18, CDBM16, HST+11, JBG+17, JH11, Sza13b, Sza13a, Sza16, YW17, YTYA17]. **velocity-dependent** [HST+11]. **Velocity-gauge** [PVK+18, YW17]. **VENUS** [LSK+14, PCGM14]. **VENUS/NWChem** [LSK+14]. **ver** [BBRS19, RSBB14]. **Verification** [LLE+18, DGS+19, YG12]. **Verlet** [LYJY10]. **versatile** [Sou14, ZSW+17a, ZPS+18]. **Version** [AAT+20, AFZ17, ATCZ19, BC19, CB17, FLZ+18, Hak19, HS18, ZZD+16, AC13, AFZ18, AC18, BPC13, BB13a, BH16, BLG14, Bon15, Bon16, BHW+12, BBH+15, CWW10, CWW15, Cip11, FLA+16, FGJB19, Gin10, GRR+14, GFB+10, GBJ+13, GCVA14a, HAV+14, HD17, JCL10, Jia18, JGB+13,

Kol14, KDM11, KUVV13, LCJ10, LZ11b, LRR+15, MFS10b, MAM14, MYP+14, MG10b, Nat09, Nat10, NS11a, OKP10, Org15, dlRL11, dlRAPL11, PSL+17, PR12, Pit12, PVK+14b, RDVS18, RHBH15a, RHBH15b, SMOB19, SSG+18, SRS+18, SDM+12, SDS+17, Sit16, SSK+13, TV10, WMK11, WW13, WRMR19, XW15, ZXL16, ZMPT13, DIR+19, FP14, Sem16, ZE16]. **versions** [Cip13, KRW13, dSdO12]. **versus** [FBN+13, RD10]. **vertex** [BDGG19, Eks11, Sus17b]. **vertexing** [Dim14]. **vertical** [TKL+12]. **Very** [BC10, MNOØ11, Fu19b, GMC18, LOV10, MN16]. **very-high-order** [Fu19b]. **Very-high-precision** [MNOØ11]. **VEST** [SBQ14]. **vh** [BHZ13]. **via** [ACdS13, AG14, ADdM14, BK11a, Boe14, BHW+12, BMG+15, CS17, DG10b, DS10, DN13, GB11, GH15, GTG+11, JTT11, LPBH11, Law19, LN16, LWJV18, Maz13, Per14, PG19, SGDS16, SDL+16, TO10a, UA17, XLL15, YJK11, ZZ17a, ZFZ19, dSF18, dlHV12]. **viability** [BL18b]. **vibration** [Gar19]. **vibrational** [CHW+15, HW11, YFAT17]. **vibrations** [AYDY11, LQZ+13]. **vibroacoustic** [FOB+15]. **victory}** [LKPH19]. **video** [DGPOR18]. **video-microscopy** [DGPOR18]. **View** [HS16]. **viewer** [GHK19, HS16, Kaw19]. **viewing** [KY14]. **VII** [SDM+12]. **VIII** [SDS+17]. **violating** [AKH12, CGV13, CRC+13, Mur14, RCD+10, Ros15]. **violation** [AB10, LCE+13, Urb18]. **violent** [MRSD15]. **Viriato** [LDF+16]. **virtual** [AAB+10b, BBUY13, BCM+16, GHK19, GHdF10, NOR15, TCK+15]. **viscoelastic** [MAIVAH14, RTÅT15, XD16]. **viscosities** [GZW17]. **Viscosity** [BJM15]. **viscous** [CdLOL19, GZW17, HJGL19, KHB14, XD16]. **VISHNU** [SQS+16]. **visited** [BVC13]. **Visual** [Dan12, AKV18, GGF+13, GFB+10]. **Visualisation** [BBW11, Rut18]. **Visualization** [AKH+18, GCP+15, SC14, AZS+11, Ano11o, dAFdSVM12, JEC+12, KY14, MSI+10, NBM+15, OK10, TL17, WLG+13]. **Visualizing** [ERPDFLS15]. **Vlasov** [BCDP18, CDBM16, CC14, CC15, CEF16, CHZ18, Fil13, FK12, GBSY18, KSS18, MIW+12, MIW+13, MMA15, PDJ10, SS11b, UNK12, dB14]. **Vlasov-Hybrid** [KSS18]. **VLBI** [TRM+12]. **VLBI-resolution** [TRM+12]. **VMD** [BPML12, Gio14a]. **vmf90** [dB14]. **VOF** [LHG+19]. **Vofi** [BMS+16]. **VOFTools** [LHGF18, LHG+19]. **Volgenant** [BGHN19]. **VOLSCAT2.0** [SMOB19]. **voltage** [Fer15]. **Volume** [ALA+19, HKF+12, Bal19, BMS+16, BHW+12, CHNS18, CAN11, FBN+13, Fu19a, JHH+19, KCN18, LOL+18, LHH+12b, LK15, LOK+18, LHGF18, LHG+19, MF17, ML14, MMA15, QLN14, SNB11, SC15, SHL+11, WFZG19, YLK10, Zag14, ZDWM17, LYP14]. **volume-of-fluid** [JHH+19, KCN18]. **volume-temperature** [LK15]. **volumetric** [JKIS16, MSR+17]. **Voronoi** [FJ19, BLS17, CMSN18, EDPZ19, FRG12, FLP10, JFHA19, LTP16, SOJ14]. **vortex** [CZ17, JWC13, LRC+11, PN15, TKL+12]. **vortex-shedding** [TKL+12]. **vorticity** [MN18]. **voxel** [Ham11]. **VR** [GHK19, OK10]. **vs** [BBS14, CZ19]. **VSHEC** [ZUT13].

w2dynamics [WHG+19]. **Waals**

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[MFG+13]. **wetting** [WLU11, vdS13]. **wFMM** [CC12]. **WGMode** [Bal19]. **Wheeler** [SMdONF14]. **where** [ACDdM19]. **wherever** [TIMM13]. **whispering** [ALSW14, Bal19]. **white** [Er14]. **Wide** [SGSG19, HC16, MST+18, PG10]. **wide-band** [HC16]. **Wideband** [CC10b, CC12]. **widths** [BGM+14]. **WIEN2k** [AKZ+13, CSPAD10, PBMAD12]. **Wien2wannier** [KAW+10]. **Wigner** [CM14a, RA13, SD14]. **Wikipedia** [ZLLP17]. **WiLE** [Pre18]. **Wilson** [ABC+18, BW12b, CDS+13b, CZ19, Pre18, STK10, TKS10, Trö11]. **wind** [FXZ+14, WFZG19]. **window** [LP15]. **windows** [CND11, NDSH18]. **wires** [ACTP15, GZL14, KBB+17, NEW+18]. **wise** [LFG14, PDL+18]. **within** [BBB+18, BCP13, BG11, CM15, DT11b, DA16, FWZ+12, GTK+19a, GBR+14, Gor19, Hal17, Hol19, KSTR15, LM19, MBFB13, NFI17, PBMAD12, PVK+18, VDA+19, ZZH+16]. **without** [AMR15, BW12a, BAK+15, BAK+16, BAK+17, FZ16, FGLB12, GD14, Kom15a, LGW13, MJKB18, TKJ19, UO15b]. **wobbling** [OKP10]. **Woods** [DT18, MAM14]. **woptic** [AWK+16]. **work** [LHSL14]. **Workflow** [LYZ13, CCdC+11, DRI+16, HKVR10, Kro16, MV11, RK11]. **working** [CFW17]. **works** [GES13]. **world** [CLLK11, FLP10, QHC+10, dSLF13]. **Worm** [MEG12, KVW11, MGS13]. **wormlike** [Krö19]. **wrapper** [MMSF+15]. **wurtzite** [HWW12].

X [BMU11, BMF+19, Bru13, CDSG11, Cip13, DA16, FWS+17, GTL+17, GSB+14, LP15, LS12b, MD11b, PBMAD12, Pat15, Pat17, Sht17, Tic10, TVGB15, WG16a, WFDK19, XHLUF+18, YvOSM15, YWOD19]. **X-factor** [XHLUF+18]. **X-point** [BMU11]. **X-ray** [Bru13, CDSG11, Cip13, GSB+14, LS12b, MD11b, PBMAD12, Tic10, BMF+19, DA16, FWS+17, GTL+17, LP15, TVGB15, WG16a, WFDK19, YvOSM15]. **xAct** [Nut14]. **Xeon** [Lya15, RJKC16, CGSB18, MSS+14, SBE+16]. **XMDS2** [DHJ13]. **XML** [BDKS10, JTH14]. **XML-based** [BDKS10]. **XQCAT** [BBB+15]. **XRF** [MPSV15]. **xSLHA** [Sta19]. **XtalComp** [LZ12]. **XtalOpt** [AFZ17, AFZ18, ATCZ19, FLA+16, LZ11a, LZ11b]. **XTOR** [ML17]. **XTOR-2F** [ML17]. **xTras** [Nut14]. **XY** [KO16, SFP11].

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