A Complete Bibliography of the Publications of Jonathan Michael Borwein

Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA
Tel: +1 801 581 5254
FAX: +1 801 581 4148
E-mail: beebe@math.utah.edu, beebe@acm.org, beebe@computer.org (Internet)
WWW URL: http://www.math.utah.edu/~beebe/

08 May 2018
Version 1.48

Abstract
This bibliography records publications of Jonathan Michael Borwein.

Title word cross-reference

#11418 [BB09e]. #13553 [Bor81a].

(a, b) ← ((a + 3b)/4, (\sqrt{a^2 + b^2})/2) [BBxxb]. (a, b) ← (\frac{a+3b}{4}, \frac{\sqrt{a^2+b^2}}{2}) [BB89b].
(G) [BBL99]. 1/\pi [BB87b, BB88d, BB93d]. 24 [CKM*16, BB16l]. $25
[BB93g]. $27.95 [BB91d]. $30.00 [Coh15]. $44.95 [BC96]. $45 [Zei05]. $45.00 [Sha05]. $49 [Zei05]. $49.00 [Ban10, Sha05]. $49.95 [Ber88]. 5
[Ade13, ZS12]. $59.50 [Bor06o]. 6 [ZZ14]. $65 [Od11]. $69.95 [Bai91]. 8
[BB16l, Via16]. $99.00 [Bor99b]. [na + b] [Bor91n]. [n\alpha + \gamma] [BB93e]. *
[BFG03]. b [BBG04b]. R [DL02]. C1 [BKW02, BFL02]. W [BL16b]. D4
[So95]. DAD [BLN94]. E6 [Sol95]. E8 [Sol95]. E6 [BL11]. \ell_1 [BWW14]. e
[LS00, YS00]. k [BBB96b, BBB97d]. L [BB15c, BB07c]. L3 [BZ97, Hon85].
nfty [Hon85]. l [Bor98g]. L1 [BL93b, BV97]. L1(\Omega, \mu) [BF93c]. L1/2
\[ L_p [BTBT88, BBL10]. \] \( n [BB84d]. \) \( p [BLS+16, BLS+17]. \) \( \pi [AW97, ABBS12, Bai88, BBC+11a, BBC+12b, BBC+12c, Bai16b, BMMW16, BB83, BB84b, BB84c, Bor85b, BB86b, BB86c, BB89a, BB96c, BG97b, Borxx, BB11j, Bor14o, Bor16m, Gan14, GG07, Gui08, Nim15, TK97, Wei15]. \) \( \pi^2 [BBMW11, BMMW13]. \) \( q [LL01, PP11, War03]. \) \( R^* [BB96w]. \) \( \theta(z, q) [HGB93]. \) \( \phi [BFG03]. \) \( \beta [Bor82c]. \) Weak \( \phi [BF95b]. \) \( x_n := M(x_{n-1}, x_{n-2}, \ldots, x_{n-k}) [Bor94a]. \) \( xy + yz + zx [BC00]. \) \( \zeta(2n + 2) [BB05, BBB06a]. \) \( \zeta(4) [BB95d]. \) \( \zeta(4n + 3) [AG99, BB97a, Bor06o, Bor97u, Bor97v, BB05f]. \)


0 [BC96, Bor06o]. 0-12-558630-2 [BC96]. 0-19-850763-1 [Bor06o]. 0-691-14247-5 [BO11b].

1 [Bor06o, Sha05]. 1-56881-136-5 [Sha05]. 1-56881-211-6 [Sha05]. 10 [Bai17d]. 100-Digit [Bor05-40]. 11th [CGM95]. 125th [AAB12]. 14th [IEE08]. 17th [IEE08]. 1880-2 [Bor99b]. 1983 [SBW84]. 19th [Hd12].

2 [BC96]. 2000 [Tod03]. 2000j [BZ02a]. 2001 [BB12p]. 2002 [KG04]. 2012 [BB+13]. 2013 [Bai14a]. 2014 [BBC+14a]. 2016 [BBS17]. 2017 [Bai17d, BE16]. 20th [IEE08]. 21st [Bai12r, BBC+14a, Bor03-27, Bor03-28, Bor03-30, Bor04-27, Bor04w, Bor04x, Bor04y, Bor04z, Bor09r, Bor10a, HF05, Hoa05, R+05, Zei05, BB04b]. 25 [Bai17a].

38 [BZ02a, BZ02b].

4 [Bor81a]. 4N [Bor97p]. 4th [HY14].

5 [Sha05]. 51 [Bor81a]. 5th [BF06b].

60th [BB+13]. 6430-6435 [BSZ+83].

7th [KG04].

8 [Zal86]. 80th [Ano15]. 85h [Zal86].

= [IL09].

A. [BS14b]. AAECC [CGM95]. AAECC-11 [CGM95]. AARMS [Bor05d, Bor05e, Bor07a]. Abel [Bor03p]. Absence [BS11b, BS10b, BS10c, Bor10i, Bor10j, Bor11q, Bor11r]. Abstract [BW79a, BW79b, BW81c, BW81b, BW82a, BW82b].

abundant [BB12c]. Academic [BC96]. Access [Bor05-27]. Accuracy [Bor05-40]. Accurate [BB14c].

ACE [Bor05-27]. ACEnet [IEE08]. Action [BBC07b, Bor07m]. Activated [BBB96a]. Active [BL99].

 Actually [Bor11g, BB12g, BBWY11c, BBWY11b]. Acyclic [BW06].

adaptive [BN15, NFB17a, NFB17b]. add [BB11f]. Addenda [BC15b]. Addendum [BZ02a]. Addition [BG95]. Adjoint [Bor83a, BBWY11e, Zäh86]. admit [BV96a, BV96b]. Adrian [Tod03].

Advanced [Bai91, BL87, Ber88, BSZ83, BB85, Bor85a, BN86, Bor03b, Bor03c, Bor03a, Bor04f, Bor04g, Bor04h, Bor04e, Bor04d, Bor04a, Bor04b, Bor04c]. B. age [BB12-28, BB13o]. Also [BB16m]. Alternating [BB86a, Bor10c, Bor10d, HNP10, BB93a, BB94a]. Alternative [Bor95c, BBG95b]. am [Bor11m, Bor11n]. America [Coh15, Bor12t, Bor12u].

American [BC15a, BC16]. among [BF95a]. amongst [Bor94b]. AMS [BE16, Bai16a, Jac09]. Anal [BZ02b]. Anal. [BZ02a]. analogue [PP11].

Analyses [Hir17, BBG93, HGB93]. Analysis [Ano15, ABMMY13, BBKL16, BBKL17, Bor72, BBS89, BB92b, Bor96a, Bor99a, BMS99b, Bor99v, BL00a, Bor00v, BZ05, BM07d, Bor08i, Bor08j, Bor09y, BLY13, BLY14, Bor16j, Bor16k, BL16a, BL16a, BG16c, Bor16z, BLT17, Bor17b, Tod03, ABMMY14, BMMW17, Bor81b, BS86, BS87, Bor87k, Bor93p, Bor94j, Bor94l, Bor94m, BL94a, B96, Bor97o, BS97a, BTZ97, BZ97, Bor98k, Bor98l, Bor98m, BZ99a, Bor99u, BL06, Bor06-30, BZ06, BM07c,
Boltzmann [BH95]. Book [Abb00, Ask88, Bai91, Ban10, Ber88, Bor90b, Bor92c, BB93g, BC96, Bor07c, BS14b, Cas99, Coh15, HF05, Hoa05, How14, Lor90, Lor09, Odl11, Rob06, Sha05, Win88, Zei05, BB97b, BB00a, BB04a, BB91d, Bor09b, Bor11-37, BO11b, Tod03, Abb00, Rob06]. Books [Bai91]. Borchardt [Bor88f]. Bornological [BFV93a, BFV93b, BF95b]. Boole [BCM09]. Borchardt [Bor88f]. Bornological [BFV93a, BFV93b, BF95b]. Boyce [BCM09]. Bovier [BB01b, BBR02, BCR12, BB13a]. Boyce-Waites [BBR02, BCR12, BB13a]. Boycott [Bod91]. Boyer [BB84e, BS17, Bor89b, Bor97g, TK97]. Boyles [Bor06]. BPP [BB06b, BB08d, BLL94, Bor06j, Bor06k, BBL99, BC09]. B pleading [BB06b, BB08d, BLL94, Bor06j, Bor06k, BBL99, BC09]. Bounds [BB06a, BB08d, BLL94, Bor06j, Bor06k, BBL99, BC09]. Box [BBC07a, BCC10, BBC10, DF05, ZH06]. Boundedness [BMV06, BF89a]. Boundaries [BS86, BS87]. Bounded [BBT00, BL99, Bor86c]. Bounding [BMV06, BF89a]. Bounds [BB06a, BB08d, BLL94, Bor06j, Bor06k, BBL99, BC09]. Box [BBC07a, BCC10, BBC10, DF05, ZH06]. box-constrained [DF05]. Bradley [AG99, PP11, Zha10]. Bradely [Bor15e]. brain [BB12k]. Brainstorming [Bor98c]. Brave [BBB+96a]. Bregman [BB07a, BB01b, BBC03, Bor02b, BRS11]. Brézis [BBWY11, BBWY12]. Brief [Bor77d, BC15a, BC16]. Bringing [Bor03a]. British [BBJC97]. Broadhurst [Cvi10, Zha10]. Brooks [Bai91]. Brooks/Cole [Bai91]. Brother [Bor08a]. Brouwer [Bor98d]. Browder [BBWY11, BBWY12]. Broadhurst [Cvi10, Zha10]. Brooks [Bai91]. Brooks/Cole [Bai91]. Brother [Bor08a]. Brouwer [Bor98d]. Browder [BBWY11, BBWY12]. Budget [Bor14a]. build [Bor13a]. bump [BFKL01, BFL02]. Bumps [Bai91]. Burge [War01]. Burgers [BBWY11]. Burnaby [BBJC97]. Bytes [Bor05-39].
Communicating [BMPR02, BRR08, Ban10]. communications [Bor92d]. Community [Bor03q, BS05]. compact [BRLZ00, BLZ01]. Compactly [BLM00]. compactness [BF95b]. Companion [HDG+15, Bor09b]. comparison [BGL93]. compendium [BBB96b, BBB97d]. Competition [Bor77d]. Complementarity [BD86, AR13, Bor84a, Bor85c, Bor87e, BD89, HLZ14, HLY16, KJR16, LLS11, LZ14, Li15]. complementary [BC09]. complete [BZ92]. completely [SZ14]. Completeness [Bor83b, QR07]. Completion [ABT13a, ABT14a, Bor13i, Bor14f, Bor15g, Bor16p]. Complex [BC04a, BMN00, Bor04-29, Bor10-27]. Complex-Parameter [BC04a]. Complexity [BB84e, BB87d, BB88e, BBxxa, BB17b, BB98a, Ber88, Wim88]. complicated [Bor14y, Bor16-27]. composite [HL15a]. Composition [KMZ+03]. compositions [BM97e]. Compound [BB93f]. Comprehensive [BS14a, BS14b]. Compressed [BB13d, BL17a, BL17b, Bor09c, Bor10h, Bor110, QYX14]. compressive [XWQ14]. Computation [Bai88, BB08a, BBMW11, BB12t, BBC14b, BBC'14a, BB15b, BB15a, BB16a, BB16b, BB16c, BBMW17, BB17a, BB84a, BB97b, Bor99g, Bor99h, Bor99i, Bor99j, Bor99k, Bor99l, Bor99m, Bor00, Bor00b, Bor00c, Bor00d, Bor00e, Bor00f, Bor00g, Bor00h, Bor00i, Bor00j, Bor01l, Bor01k, Bor01b, Bor03c, Bor03a, Bor04a, Bor04b, Bor04c, BB04a, Bor05-41, BH06, Bor07h, Bor07t, Bor07u, Bor08h, Bor09h, Bor09i, Bor09j, Bor10, Bor10m, Bor11s, Bor11t, Bor11u, Bor11v, Bor12-27, Bor12d, Bor12e, BMS13, BSM13, Bor14g, Bor14h, Bor14i, Bor14j, Bor14k, Bor14l, Bor14m, Bor15h, Bor16a, BB17b, BB17c, BB17d, BB17e, BB17f, Bor93p, BS00, BBG04a, BB10c, BLLN95]. Compute [BB97c, BB00b, BB004b, BB16b, BB97a, BB899]. computed [MTCB98]. Computer [BB05a, BB08c, BBKL16, BBKL17, Bor92j, BB92b, Bor93c, Bor93d, Bor06h, Bor07g, Bor08d, Bor08e, Bor08f, Bor09d, Bor11-28, Bor14h, Bor14i, Bor14j, Bor14k, Bor14l, Bor14m, Bor15h, BB12l, BB12g, BB13o, Bor1e, Bor1f, Bor91g, Bor91j, Bor91k, Bor91l, Bor91m, Bor92f, Bor92g, Bor08c, BD09]. Computer-assisted [BB05a, BB08c, Bor06h, Bor07g, Bor08d, Bor08e, Bor08f]. computers [BB12a, BB16f, BB16a]. Computing [BBLZ13, BBS16b, Bor98h, BB01d, Bor01e, Bor02s, Bor02t, Bor03i, Bor04f, Bor04g, Bor04h, Bor05-27, Cal16, IEE08, JWDS'+14, Bor92l, Bor92m, Bor92n, Bor98q, Bor03y, Bor03z, Bor05-40, Bor06-28, BS11c, BS12a]. Conant [Bai16a, BE16]. concave [Bor86b]. Concavity [SZ81, Bor90b]. concept [BRS11]. Conditions [BBY12, BBY14, Bor82b, BZ88, BL91d, BTZ98]. Cone [BW81a, BW05a, BW81d, BB84f, BS89, BBL04, BG09]. Cone-convex [BW81a, BW81d]. Cone-monotone [BW05a, BBL04, BG09]. Cones
...
BN94, BL94a, BF95c, BV95a, Bor95n, Bor95o, BV96c, BLN96, BFW97, BZ98, BMN00, BLM00, Bor00r, Bor01p, Bor01q, Bor01r, BV02, BV04, Bor05-32, Bor05-33, Bor05-34, Bor05-35, Bor05-36, BMV06, Bor06-33, Bor06-30, Bor06-34, Bor06-35, BZ06, BM09, BGHV09, BM10, BYY12, BLY12a, Bor12o, BLY13, BLY14, BV96c, BLN96, BFV97, BZ98, BMN00, BLM00, Bor00r, Bor01p, Bor01q, Bor01r, BY12, Bor12o, BLY13, BLY14, Bor14n, Bor15i, BG15b, BG15c, Bor15r, BG16b, NWY09, PD18, YW12, Zhu91, How14, Tod03.

**convex-concave** [Bor86b].

**Convexity** [Bor07-28, Bor07-29, Bor07-30, Bor07-31, BS11b, BS15a, BB11a, BBC01, BB01b, BO76, Bor77a, BO78, Bor78c, BBFG01, Bor07-27, BS10b, BS10c, BS10d, Bor10i, Bor10j, Bor11q, Bor11r, BY12d, BY14b].

**convolutions** [BBEM10].

**Copulas** [Bor13j, PHB12, PHB14].

**correcting** [CGM95].

**correlation** [BR14c, BR14a].

**cosmic** [BB11d].

**could** [BB12l].

**Counter** [Bor17b]. **Counter-examples** [Bor17b]. **counterexamples** [BV10b, How14].

**Counterpart** [BB88c, BB91c]. **Counterparts** [BB15l].

**counting** [BB11e, BB93g].

**country** [Bor13a].

**crackers** [Bor11a].

**Crandall** [BB12q, BB15c].

**Crash** [BB15m].

**Creativity** [Bor09o, Bor12m, Coh15].

**Crime** [BB93g].

**crisis** [BB12-29].

**critical** [BKW02].

**Crucible** [Bor09d, Bor08c, BD09].

**Cubic** [BB84b, BB88c, HGB93, Hir17, AB15, BB86b, BB90b, BB91c, BBG94b, Bor95c, LL01, Liu00, MP18, XY12].

**Cultures** [Sel16].

**Cup** [BR14b].

**Curiosity** [BB12h].

**curve** [Bor90e, Bor90f].

**CUSCOS** [Bor89c, Bor89d, Bor90y, Bor90z, Bor90-27, Bor90-28, Bor91a].

**Cusps** [Bor04l, Bor04m, Bor06e].

**Cyclic** [BT13a, BT13b, BBB+07, BBL97a, BBL97b, BL08, BLY13, BLY14, BT14c, BT15, DHSZ06, HLY16, XSW12, ZHO6].

**cyclotomic** [HC09].

**D** [BB93g, How14, Odl11, Bor05-46].

**D-DRIVE** [Bor05-46].

**Danger** [BB11c, BB13e].

**dangerous** [BB12n].

**Data** [BB14e, BB15m, Bor09r, BTZ98, PHBH13].

**date** [BB12d].

**David** [Hoa05, Sha05, Zie05, Bor04n, BE16].

**Day** [BB13k, BB15o, BB16i, Bor07v, Bor08i, Bor08m, Bor10u, Bor11w, Bor11x, Bor11y, Bor12t, Bor12u, Bor12v, Bor13r, Bor14t, Bor16u, Bor16c, BB14i, Bai17d, BB14c, BB14j].

**Days** [Bor11d, Bor16n, Bor11h].

**DC** [Coh15].

**Deafening** [Sol15].

**death** [BB11c].

**December** [Bai13, BB9C79, BBL+13].

**Decennial** [Bai88, Gan14, BB11e, Bai16b, BBGPxx].

**decision** [Bea13].

**decisions** [BB13q].

**Decomposition** [BL92b, Bor04o, BW07].

**Decompositions** [Bor06b, BWY10, Bor79e, Bor07b].

**decreasing** [BL93a].

**Dedekind** [BG97b, BG97a, BB98b, BB98c].

**Dedekind-zeta** [BB98b, BB98c].

**Default** [BBL+13, SBB13, BBS13a, BB13o, Bor13-29, Bor15m].

**degree** [Ade11, Ade13].

**déjà** [Tre13].

**della** [BB95b].

**delta** [BG15b, BG16b].

**demand** [JY12].

**demonstration** [BBS+15a].

**Denial** [BB13r].

**Denominators** [BZ87].

**dense** [BB99b, BBW011c, BBW011e, BBW012c, BY12f].

**Densities** [BSWZ11, BSWZ12, BSV15, BSV16, Bor14s].

**Density** [Hon85, BS16b].

**Department** [Bor03j].

**derivative** [Bor94i, BLN95, Bor95n, Bor95o, BLLN95, BLN96].

**Derivatives** [BB17a, BFV93a, BD16a, BD18, AL10, BB16a, BB16b, BFV93b, Bor94n].
BF95b, Bor95w, BMW97]. Deriving [BB14p]. Descent
[Bor09c, SD15, RS02]. design [BBL1a, BBL1c]. Desperately [BB15f].
Determination [BBB06a, BBB05, BM00, BT14b, BT14a]. Determinations
[BB08b, BB98c]. determined [BB97c, BB05f]. developments [BB01a].
devices [Bor0w]. dian [BB95c]. Dictionary [Bai91, BB88b, BB99c, BB99d,
BS14a, Lor90, BB91a, BB02, BB90d, BWB97, BS14b]. did [BB12h]. didn’t
[BWB97]. Diego [BC96]. dies [Ano16, BB12q, Bai16c]. Diewert
[Bor90b]. Difference [Bor11p, BB11a]. different [PHBH13, Zha13].
Differentiability [BBS10, Bor90g, Bor90h, Bor90i, Bor90k, Bor90j, Bor91d, Bor92a,
Bor92d, Bor92e, BB04b, BV09, BB76a, Bor82a, Bor86e, Bor86f, BF97, BP87,
Bor90a, Bor90-40, Bor90-41, Bor90-42, Bor91q, Bor91r, Bor91s, Bor91t, Bor92b, Bor92c,
Bor93a, Bor93f, BF93b, BN94, BW05a, BMV06]. differentiable [Bor95d, Bor95e, BW97a, BFKL01].
Differential [BM97c, MR96]. Digit
[Bor05-40, Ade10, BB12v, BBG04b, Bor11i]. digit-extraction [Bor11i].
Digital [BB02f, BS03, Bor03-35, Bor05h, BRR08, Ban10, BM06, Bor06-36].
Digitally
[BBB+96a, Bor08g, Bor09a, Bor09e, Bor09f, Bor09g, Bor12-32, Bor09u].
Digitally-assisted
[Bor08g, Bor09a, Bor09e, Bor09f, Bor09g, Bor12-32, Bor09u]. Digitized
[BB05e]. Digitizing [Bor02g]. Digits
[Bai88, BMW11, BBC+12c, BB13a, BB14e, BBBR17, BB97c, BB00b, BB04b, Bor09y, BB16, Gain17, BB97a, BBM13, BB13b, BB14k, Bai16b, BBMW16, BBMW17, BB96b, BBx]. Dilemmas [GS08].
dilogarithmic [Cvi10]. Dimension [BP99g, CKM+16, Via16].
Dimensional [BCC10, AAW06, BW81c, BW86, Bor91b, Bor92e, Bor92k, Bor92t, Bor94t, BF95a, Bor95n, Bor95o, Bor97f, Bor97t].
Dimensions [BB86a, BB16l, Bej94, BL91d, BFL02, Bor14s, BS15, Bor15o, Bor15p, Bor15q, BS16b, BS16l]. Diophantine
[Kom00, Kom02, Kom04]. Dirac [BH94]. Direct
[Bor97a, Bor81c, LLC+95, FN15]. Directionally [BS84a]. Directory
[BMP05]. Dirichlet [BB15c, Bor01g, Bor02h, Bor02i, BC03, BC04b, Bor07e].
disciplinary [Bor16h]. Discourse [BS03]. Discover [BB09d]. discovered
[Bor95c, Bor97p, Bor97u, Bor97v]. Discovering [Bor91e, Bor91f, Bor91g, Bor91j, Bor91k, Bor91l, Bor91m, Bor92f, Bor92g]. Discovery
[BB11i, BBK16, BBK17, Bor02i, Bor02m, Bor03k, Bor03m, Bor04p,
Bor05k, Bor05l, Bor05m, Bor05n, Bor05o, Bor05a, Bor06l, Bor07g, Bor07l, Bor07k, Bor08g, Bor12-32, Bor16f, R+05, Ade12, BB08c, BBG04a, Bor06h, Bor08d, Bor08e, Bor08f, Bor09a, Bor09e, Bor09f, Bor09g, Bor09u, Zei05].
distance [BB01b, BF94]. Distinct [BW97a, BBT00]. Distributed
[Bor99b, Bor99c]. Distribution [TB00, BG94]. distributions [BCM03].
Ditor [BO11a, GN16, Mil90, Mil89, MW12]. divergence [Lor08].
Dizionario [BB95b]. Do [BB13i, BB15i, BB13k, BB14c, BB14d].
Doctor [BB12b]. dodgy [BB12a]. Does [BB15f]. doesn’t [Bor07q, Bor07p].
Doing [Bor96b, Bor97a, Bor97b, Bor97c, Bor97e, Bor97d, Bor99e, Bor99f, Bor99d, Bor00m, Bor98r, BS99, BB11g]. domain [BY12d, BY14b]. Don’t
[Bor13c, BB11f]. double [BB12i, BZB08, Mer15]. Doubly [BLN94].
Douglas [AB12, ABT13a, AB13, ABT13b, ABT13c, ABT14a, ABT14b, ABT15, ABT16, BS10b, BS10c, BS10d, Bor10i, Bor10j, BS11b, Bor11q, Bor11r, BT13a, BT13b, Bor13i, Bor13q, BT14c, Bor14e, Bor14f, BT15, Bor15g, Bor15r, BCL16, BLS+16, BLS+17]. Dreams [Bor02p].
Dreams drive [Bor13c, Bor05-46]. Dual [BV93, BV94a, BTBT88, BMN00, BS10a]. Duality [BL91b, BF01, Bor09-27, BC10, Ara07, Bor80d, Bor83a, BK83, Bor83f, Bor86a, BL91d, BL92c, Bor94p, BLN96, BBY12, BMY14, Zal86].
Dubious [BB14e]. Due [Koh01]. dull [Bor11b, Bor11c]. Dumb [BB13p].
dunce [BB13q]. during [SBW84]. Dykstra [BB94a]. Dynamic [Bor02r, KMZ03, BNCB99, BS97a, LLC95]. Dynamics [Bor04-30, Bor04-29, Bor04-28, BK05, BL05, Bor10q].

E3163 [KC89]. E3164 [DACK88, DNG+86]. E3325 [Rud89]. E3335 [KWK+90a, KWK+90b, KWK+90c]. E3384 [Stu90]. E3388 [CJKB92].
Earth [Bor13s, BB12-28, BB12d, BB12h]. East [Bor05j]. Easy [Gui08].
Eberhard [Bor06o]. ecological [Bea13]. Economics [SZ81, BB13m].

Economy [BB12r]. Edited [Bor06o, Coh15]. editor [Zal86, Bor11b, CW16, Cha16]. Editors [BM97b]. Education [IL09, Hdl2].
Effective [BB06a, BB08d, Bor06j, Bor06k, Bor07h, BBC07c, Bor07i, Bor07j, Bor08h, BBC08b]. effects [BBLZ14]. efficiency [Bor80a, BZ91, BN03, Zal91].
Efficient [BCJW13, Bor77c, BJCW13, Bor83e, HLZ15a, Yan94, Zho12]. eigenvalue [AR13, GDT15, JD13].
eigenvalues [Bor84c]. Einführung [BD11].

Eisenstein [Liu01, XY12]. Ekeland [Bej94, Bor88g, Bor89h, Bor88i, Bor90m, Bor90n, LS00, YS00]. elastic [HYG09]. Electron [BBSZ87, BBSZ88].
Electronic [Bor01n, Bor01m, Bor02n, Bor03q, BS97b, Bor97n]. Elementary [ABB16, ANO+83, AJ86, BB84a, BB97b, BB00, BB04a, CJK92, DAK88, DNG+86, DBCB88, EWM86, GC88, KJ86, KC89, KWK+90a, KWK+90b, KWK+90c, Mon89, NJS88, NOL86, Rud89, SZUM86, Stu90, BB16o].

Ellipses [BLS+16, BLS+17]. Elliptic [BBG08, BB84c, BB87, Borxx, Bor10x, Bor11-29, BBG95b, BZ92, BBGW11, LL01, PT14]. else [BBW97].
Emerging [BC99]. Empirical [BBC+11a, BBC+12b, Bor97g]. Empirically [BB97c, BB05f]. Encourage [BB15g]. Encyclopaedia [Sel16].
Encyclopaedia [BC96]. End [Bor09d, Bor03y, Bor03z]. Energy [BB14f, BB14g, BB15d, BB16h, BBSZ87, BBSZ88, BB12e]. engaged [BB16g]. engineering [BBC+11b]. engineers [BBW97]. Engines [Bor04p, Bor05k, Bor05j, Bor05m, Bor05n, Bor05o, Bor06i, R05].
enhancement [BM07a]. ENIAC [Bor12n, Bor14o, Bor14r, Bor16o].

Enlargements [BBY11, BBY13]. enough [BB14m]. entire [Bor02g, BS10a]. Entropic [BL11]. entropies [BGL93, BH94]. Entropy
[BL93c, BLL94, BLN94, Bor97k, Bor01o, Bor05-32, Bor06-33, Bor08p, Bor09v, Bor10k, Bor10v, Bor12p, Bor13j, Bor13k, Bor13o, BHP14, Bor90c, Bor90d, BL91a, Bor91b, Bor91c, BL91b, Bor91h, Bor92e, Bor92o, Bor92k, Bor93e, Bor93k, BL93b, Bor94i, BH95, Bor95n, Bor95o, BLN95, BLN96, BCM03, Bor12o, PHB12, PHBH12, PHB14]. entropy-like [BL91b].

Entropy-Type [Bor01o]. Entry [BS16a]. Environment [IEE08]. Environments [Bor04e, Bor04d, Bor04i, Bor06d, Bor06b, Bor06c, Bor06g].

Epi [Bor87m, BLM00]. Epi-Lipschitz-like [Bor87m]. epi-Lipschitzian [BLM00]. Epigraphical [BV96c]. equality [Bor77a]. equation [BB13d, BBCZ13, NFB17b]. Equations [BM97c, BBB04b, BBB16, BBB97a, Bor86f, Bor87g, Bor87f, BB89a, BBB99, Bor93k, BG94, DLL05, MR96].

Equivalence [BMS99b, Zho12, Bor91b, Yan94]. Era [BRR08, BB12e, Ban10]. Erdélyi [FK00].

Erdos [Cra12, Mer15]. Ergodic [BG16a]. Error [BB08d, Bor06j, Bor06k, BB13m, BBL99, CGM95]. error-correcting [CGM95]. Especially [Bor94h]. essays [BR01]. Essential [BBC01, BB12r, BWB97]. Essentially [Bor95d, Bor95e, BM97d, BM97e, BM98a, BM98b]. estimates [BL91a, BL93b].

Estimation [Bor91b, Bor92e, BTBT88, Bor90c, Bor90d, Bor91b, Bor91c, BBT92]. eta [BG97b, BG97a]. Euclidean [Bor48b, La 09]. Euler [BB94a, BB06a, BB08d, BBD89, Bor98f, Bor90-29, Bor90-30, Bor90-31, Bor90-32, Bor90-33, Bor90-34, Bor90-35, Bor90-36, Bor90-37, Bor90-38, Bor90-39, Bor91j, Bor91k, Bor91l, Bor91m, Bor92f, Bor92g, Bor92j, BBG95c, Bor95f, BBB96b, BBG96, Bor96f, Bor96g, Bor96h, BBB97d, Bor97f, BDD97, Bor98f, BB00, BB04, BB05g, Bor06j, Bor06k, BB06b, BZB08, BCM09, BBD16]. Euler/Zagier [BBB96b, BBB97d, Bor97f].

Eulerian [BBB15]. Evaluation [BB17a, BBSS17a, BBSSL17b, BBSL18, BZ87, BG96, Bor97f, BD16a, BBG94a, BB16a, BB16b, BZ92, BBG95c, Bor95f, BBC08a, BZB08, BD18]. Evaluations [BBB96b, BB97d, G05, BBBS08, BB11a, BS12b, BBSW12].

even [BKW02]. ever [Bor03g]. Every [BBWY11c, BBWY12c]. everybody [BB11d, BB11g]. everywhere [Bor12k]. Ewing [Jac09]. Exact [Bor99g, Bor99h, Bor99o, Bor00b, Bor00c, Bor00d, Bor00e, Bor00f, Bor00g, Bor00h, Bor01i, Bor01j, Bor01k]. example [Bor92d, BD11].

example-oriented [BD11]. Examples [BFV94, Bor94c, Bor17b, BB05b, Bor87m, Bor93p, Bor95t, BZ98, Tod03].

Excel [BB13a]. excluding [BB04b]. Excursion [Bor87d, Bor88a, Bor88b, Bor88c, Bor88d, Bor88e]. Exercise [BB12s, BB16c]. Existence [BF89b, Bor82d, Bor83e, Bor84c, Bor88k, BL93b]. exp [BBC08a].

Expansion [Gn14, BB83]. Expansions [BB97, BB00, BB04, BB07c, BBCP04, BBD89, BG95, BBGPxx, BD16]. expansive [BS10a]. Expectations [BBCR13, Bor12f, Bor12g, BR16].

Experience [Bor97d]. experiences [Bor08q, Bor12s]. experiencing [KMT16]. Experiment [Bor3-27, Bor03-28, Bor03-29, Bor03-30, Bor04u, BB04b, Bor05-30, Bor05-28,
14

Bor05-29, BB08h, Bor10a, HF05, Zei05, Hoa05, Sha05]. Experimental
[BBG94a, BB01a, BBB05, BB05b, BBB06a, BBC+ 07b, BB09c, BB09a,
BB10a, BBBZ10b, BBBZ10a, BBL+ 13, BB14a, BB15h, BB15i, BB16d,
BB17a, Bai17b, Bai17c, Bor94d, Bor94e, Bor94f, Bor94q, Bor94s, Bor94r,
Bor95f, Bor95g, Bor95h, Bor95i, Bor95j, Bor95k, Bor95l, Bor95m, Bor95x,
Bor96c, Bor99g, Bor99h, Bor99i, Bor99j, Bor99k, Bor99l, BBGPxx, Bor00b,
Bor00c, Bor00d, Bor00e, Bor00f, Bor00g, Bor00h, Bor00i, Bor00j, Bor00k,
Bor01h, Bor01i, Bor01j, Bor01k, Bor02j, Bor02k, Bor02a, Bor02l, Bor02m,
Bor04t, Bor05a, Bor05p, Bor05q, Bor05-37, Bor05-38, Bor05-41, Bor06m,
Bor06n, Bor07l, Bor07k, Bor07m, Bor07n, Bor07r, Bor07s, Bor07t, Bor07u,
BB08g, BB10c, BaO12, Bor14g, Bor16g, Bor16f, BBKW06, BB16a, BB16b,
Bor93p, Bor93q, BBGP95b, BBGP96, BC99, Bor08c, Bor08b]. experimental
[BD09, BD11, Lor09, Odl11]. experimentally [ABBS12, Bor93j, BB11j].
Experimentation
[BB12t, Bor92j, BBGP95a, Bor03l, Bor03m, Bor03n, Bor03o, BBG04a,
Bor04q, Bor04r, Bor04s, Bor09h, Bor09i, Bor10l, Bor10m, Bor11s, Bor12-32,
Bor12h, Bor13l, Bor13m, BB11h, BB12u, Bor09u, Sha05, Zei05].
Experimentelle [BD11]. experimenting [KMT16]. Experiments
[BBG06]. Explainer [BR12, BR13b, BR14a, Tre13]. Explicit
[BB06b, BB84d, BB87a, BL92d, BBG95c, BB86b, BS10a]. Exploration
[BB12t, BB16k]. Exploratory [BB11h, BB12u, Bor09h, Bor09i, Bor09u,
Bor10l, Bor10m, Bor11s, Bor12-32, Bor12h, Bor13l, Bor13m, Bor14h, Bor14i,
Bor14j, Bor14k, Bor14l, Bor14m, Bor15h]. Exploring [Bor01l, KMT16].
Exponential [BB94b, BG03b]. exposing [Bor78b]. Expressions
[BSW82, BBK14]. Extended [NWY09, NWY10, BBC14b]. Extension
[La 09, Bor82e, DABY15, Mil90]. Extensions [Bor10x, Bor11-29, Bor88g,
Bor88h, Bor88i, Bor94b, BGV02, BMV06, BBGW11]. extraction
[Ade10, Bor11i]. Extraordinary [Bai16d]. extraterrestrial [BB11g].
Extreme [Bor06m, Bor06n, GDT15, JD13].
F [Ban10]. FAA [BBS17]. FAAAS [BBS17]. Face [Cal16, Bor96k, Bor97w].
Factorial [BC18]. factorization [HNP10, HLZ15a, HLZ15b, LL13]. fail
[BW98]. failing [BB12m]. failure [Bor92o, Bor93k]. fall [PD18]. fall-back
[PD18]. Familiar [BB88e, BBxxa]. family [Bor79c, Bor80e]. FAMS [BBS17].
Fan [BZ86]. far [BB11d]. Fared [BB15k]. Farkas [Bor79d, Bor83d]. Fast
[BB84a, BZ92, BLN95, BB97b, BB00, BB04a, BD16a, BH95, BB16o, BD18].
FAustMS [BBS17]. Favourite [Bor07-28, Bor07-29, Bor07-30, Bor08u].
FBAS [BBS17]. Feasibility [ABT13a, ABT14a, ABT15, BB96a, BT13b,
Bor16u, Bor16v, Bor16w, Bor16x, Bor16y, ABT16, Bor12o, BT15, Bor15r].
Feasible [JD13, LLS11]. Featured [Bor06o]. February [ABD03, Bai17d].
Federated [BMP05]. Fee [Rei02]. Fenchel [BK83, BL91d, BH06, BH09].
Fenchel-duality [BK83]. Fermi [BB15f, BB15p, BH94]. few [BB12b].
Feynman [BB98b, BB98c]. Fiasco [BB15m, BB13l]. Fibonacci [Ade14a].
fiction [BB12f]. field [Cvi10]. Fields [Bor02p, BSZ13, Bor03p, Bor14b].
Fifty [Bor09j, Bor09k, Bor10n, Bor12i, Bor12j]. filter [AP16, ZSQ10]. Final


functions
[BV02, Bor02d, Bor02e, BGV02, BW03, BVW03, BBL04, BW05a, BW05b, BMV06, Bor06h, BBC08a, BV09, BG09, BGHV09, BV10b, BV10a, Bor11-37, BY12a, Bor12s, BY14a, BG15b, BB16o, BDT16, BS16b, BL16b, BD16b, BG16b, How14, HL15a, LL01, Liu01, Lup02, SZ14, XY12]. **Fundamental** [BB05g, Bor13a]. **Funding** [Bor07o, BB13q]. **Further** [BV94b, Mil90].

**Fusion** [BB14f, BB15d]. **Future** [BB05a, BB16d, BB16k, Bor05r, Bor07a, Bor08i, Bor08j, Bor10p, Bor12l, Bor15j, BB01a, BB12j, BB12i, BD95, Bor95u, Bor95v, Bor98c, Bor09l, Cam16].

Gâteaux [BF93a, BF93b]. **game** [BB12d, BB15b, BB15i]. **games** [BB12o].

Gamma [BZ87, BK05, Bor12q, BC18, BB15, ZB92, BC09, Bor15c]. gap [BB112, BBY14, Bor14n, Bor15i]. Garvan [Hir17]. gas [BB12e]. Gateway [Cha03]. **General** [BB06b, AB15, BBWY11a, BBWY12a, Bor85c, BV01, Bor07x].

**Generalisation** [BLS16]. **Generalisations** [Bor17b].

**Generational** [BLS+16]. Generalizations [Bor17b].

**Generic** [Bor86e, Bor99m, Bor00l, Bor00m, Bor86b, BF93b, BW00, BK01].

**generically** [BW98]. **genius** [Bor91o, Bor91p, BB91d, Bor11e]. **Geometric** [BB84a, BB97b, LBM97, BB00, B009a, Bor87d, Bor88a, Bor88b, Bor88c, Bor88d, Bor89e, BB93, BB16o, IP17]. Geometry [Bor09z, Bor11t, Bor80a].

**German** [BB96c, BD11]. get [BB14m].

**Girgensohn** [Odl11, Sha05, Zei05, Rei02, SZ14].

**Giuga** [Bor94g, BBG96, BBW97b, BMS13, BSM13]. Glenn [BE16]. **Global** [AB12, AB13, ABT15, ABT16, BB12c, NFB17a]. **globalization** [GS02].

**Glum** [BB13f, glummer [BB13f]. go [Bor15a]. goals [Bor13c]. **God** [BB12w]. goes [Bor05j]. Going [Bor12w].

**Goldbach** [Bor05c, BB05d, BB06c, Bor10b, Bor10-31].

**Golden** [Ade18a]. **Good** [Bor00j, Bor00k]. googol [Cra12]. googol-th [Cra12]. got [Bor15t]. Gowers [Bor09b].

**Gradient** [BB88a, SI16, SD15, BFKL01, BFL02, DL02, DLL05, DK16, GS02, Li15, LL13, Mar91, MP18, NFB17a, NFB17b, QYX14, Ray93, Ray97, WSDS15, XH08, XSW12, XWQ14, YW12].

**Grading** [Bor09m, Bor09n, Bor00l, Bor00m].

**Grades** [BB93b, BB93d, Ber88, BFG03]. **Graves** [BB03]. great [Bor13a]. Greatest [BB11i].

**greco** [Bor08a]. Greek

[BS14b, BS14a, Bor90o, Bor90p, Bor94h, Bor08a, SV14]. **Green** [Bor90b, BB12e].

**Grid** [Bor03b, Bor03c, Bor03a, Bor04e, Bor04a, Bor04b].

...
investigation [BBGPxx]. Investing [BB14g]. Investment [BBLZ13].
Involving [BSW82, Bor93o, Mer15, XY12]. ISBN
[Ban10, BC96, Bor06o, Bor09b, BO11b, Coh15, Odl11, Sha05]. ISBN-10
[BBCB07]. Islamic [SV14]. Israel [Bor90b, RZ15]. Issue
[AHLCh+17b, AAB12]. Issues [BL09, Bor00t, Bor03q]. Italian [Bor08a].
Italy [ABD03]. iterated [BR16]. Iteration
[BB89b, BBxxb, BT13a, AB12, BB86b, BB90b, BBG93, Bor94a, BT14c].
Iterations [Bor89g, Bor89h, BB93f, BLT17, BB91b, BR92, Bor93j, BS10c,
BS10d, Bor10i, Bor10j, Bor11q, Bor11r, Bor13q, BLT15, BLT16]. Iterative
[Bor92i, Bor92m, Bor92n, WSL16, XC11]. IV [Bor06u].
J [Ban10, Bor92c, BC96, Odl11]. J-P [Bor92c]. J.
[Cra04, MR11, SV14, Zal86]. Jacobi [BB88c, BB91c]. Jacobian [HGB93].
[BB93g, BO11b, BS14a, IEE08, Bor76b, Jac09]. John-Steiner [BO11b].
Joint [BB01b]. Jon [How14, Ano15, Bai91, BBB+13, Bai16a, Bai16b, Bai17a,
Bai17b, Bai17c, Ber88, BBS17, BE16, CW16, Cha16, KMT16]. journal
[BS97b]. journey [KMT16]. Joy [Bor98i]. July
[CGM95, BBC+14a]. June [Bor09b]. Just [BB12h, BB14k].

Kadec [BB89b, BF89c, BV93, BV94a]. Kanigel [BB91d]. Keeps [Sei01].
Kenneth [BB13c]. Kernels [BLN94]. Kestelman [BO11a]. Khinchine
[BB95r, Bor95s]. Khintchine [BBC97a]. killer [BB12a]. kind [BZ92]. kinds
[BN84]. Klee [BV93, BV94a]. Knew [BB91d, Bor15b, Bor16d]. knots
[BB90b, BB98c]. know [BB13k, BB14c, BB14j]. Knowledge
[BS05, AB03, BF06b]. Konjagin [Bor13g]. Korea [HY14]. Kós [FK00].
Krasnosel’ski [BRS92, Bor77b]. Kurt [BBC14c, BBC14d, BBC15].

L [Bai16a, SV14]. L. [BSW82]. Laboratories [Bor99b, Bor99c]. Labs
[BL99, Bor99p]. ladder [BB11d]. Lagrange [Bor80b, Bor81d, BZ16].
Lagrangean [Bor79b]. Lagrangeans [Bor80d]. Lagrangian [Bor81c].
Laguerra [BBC07c, Bor07i, Bor07j]. BBC08b]. Lambert
[Bor16b, Bor16m, BL16a, BL16b]. Large
[BBKL16, BBKL17, JWDS+14, BK14, DF05, Ray97, WM07, XH08, ZSZ16].
Large-Scale [JWDS+14, DF05, WM07, XH08, ZSZ16]. largest [Bor10-30].
Later [BB13i, BD95]. Latin [BS14b, BS14a]. Lattice [BBCZ13, BLL94,
BB94b, BGM+13, BB13d, BB13e, BBS89, BL92d, BBP98, BBS13b, BBS14b].
Lattices [BBSZ87, BS83, BY84, BS84b, BBSZ88]. Lau [Bor13g]. Launch
[Bor03-32]. Law [BB12j, BB12i, BB15n, Bor15l]. Lawrence [Bor07c].
Leader [Bor09b]. Learning [Bor05-42, Bor05-43, Bor05-44, MB16].
Lecture [Bor06c, Bor06p, Bor09z]. Lectures [Bor06c, Bor06d, Bor06t,
Bor06u, Bor09-29, Bor09-27, Bor09-30, Bor09-28, Bor09-29, Bor13-30, Bor15r].
legacy [BBC14c, BBC14d, BBC15]. Legendre
[BB97a, BBC01, Bor87d, Bor88a, Bor88b, Bor88c, Bor88d, Bor88e, BV01,
BV10a, BY12a, BY14a, TK97. **Legendre-type** [BY12a, BY14a]. **Leibniz** [BBW97]. lemma [Bor79d, Bor83d]. **LENR** [BB15d, BB16h]. Lessons [BB15m, KMZ°+03]. let [Bor13c]. **Letter** [Bor11b, CW16, Cha16, Zä86]. **Level** [BB93b, Bor99s, Bor10s, Bor11g, Bor11-36, BS00]. **Levi** [Bai16a]. **Lewis** [Tod03]. **Lexicographic** [Bor80c]. Library [Bor02f, Bor03-35]. Life [BB13c, BB91d, Bor93m, Bor03r, Bor03s, Bor03t, Bor03u, Bor03v, Bor03w, Bor03x, Bor05x, Bor05y, Bor06-27, Bor07v, Bor08l, Bor08m, Bor10t, Bor10u, Bor11v, Bor11w, Bor11x, Bor11y, Bor12n, Bor13n, Bor14o, Bor14r, Bor14p, Bor14q, Bor16n, Bor16o, BB11g, BB12h, Bor91o, Bor91p, BM06, Bor08a, Bor15b]. light [Fab89]. **Lever** [BCLM16, BHL16b, BHL16a, BCLM17, BHL17, Cha03]. Logsine [Bor11-33, Bor11-34]. **Long** [Bor14p, Bor05k, Bor05l, Bor05m, Bor05n, Bor05o, Bor05l, R°+05, Bor03y, Bor03z, Bor06-28]. **long-range** [Bor06-28]. Loving [BO11b]. **Low** [BB14h]. Lowell [Bor77d]. lower [Bor90k, Bor90l, BMS13, BMS13, BLZ01]. LRP [Bor05-27]. Isc [Bor90a, Bor92b]. Ltd [Ban10]. **Ludens** [The16]. Luke [Odl11]. lun [IL09].
BBL14, BB14o, BB15b, BB16f, BB16n, BB17b, Ban10, BB88b, BB91a, BB99c, BB99d, Bor90o, Bor90p, Bor94d, Bor94e, Bor95f, Bor95i, Bor95j, Bor95k, Bor95l, Bor95m, BBGP95b, Bor95x, Bor96c, BBGP96, Bor97e, Bor97d, Bor97g, BWB97, BBJC97, BBC99.

Mathematics [BS99, BS00, Bor01f, BBG04a, Bor05-45, BF06a, Bor08c, Bor08c, BD09, BB10c, BD11, Bor11b, Bor11c, Bor14w, Bor14x, Bor16b, Hdi12, KMT16, Sha05, Bor06o, Bor09b, BO11b, HF05, Hoa05, Sha05, Zei05].

Mathematik [BD11, Fal96].

Mathematiques [Bor00o].

MathResource [BWB97, Bor97j].

Maths [Bor09u, Bor12l, BB11g, BB11f, BB12k, BB12m, BB13g, Bor11e].

matrices [Bor84c, BR84].

Matrix [ABT13a, ABT14a, BRxx, Bor13i, Bor14e, Bor14f, Bor15g, Bor16p, HNP10, HLZ15a, HLZ15b, IP17, LL13].

matter [Bor10f, Bor10g].

Matters [Bor09u, BB14o, Bor97u, Bor97v].

Mattingly [Bai16a, BE16].

mature [Bor94o].

Maximal [BB99b, Bor06-30, Bor09j, Bor09k, Bor12x, BD15, BD16b, EB08, Bor82c, BW00, BVW03, BW05b, Bor06-32, Bor07x, Bor10n, Bor12i, Bor12j].

Maximality [Bor06-31, Bor06-32, Bor07x, BY12b].

Maximally [BY12f, BBWY11b, BBWY11c, BBWY12b, BBWY12c, BY12d, BBWY13b, BY13a, BY13c, BY14b, BY14c].

Maximization [Bor94i, Bor04-32, Bor13-31, BBM00].

Maximizations [Bor77c].

maximize [Bor09n].

Maximizing [Bor99q, Bor99r, Bor99s, Bor00q, Bor00v, Bor05-31].

Maximum [BL93c, Bor95n, BLLN95, BLN96, Bor97k, Bor01o, Bor05-32, Bor06-33, Bor08p, Bor09v, Bor10v, Bor10w, Bor12o, Bor12p, Bor13o, BHP14, PHBH12, Bor92o, Bor93k, BL93b, BCM03, PHB12, PHB14].

May [BBS17, IEE08, KG04, RZ15, BW97a, BW98, Bor15d].

Me [Bor04n, Bor11j, Bor11k, Bor11m, Bor11n, Bor14c, Bor12b, Bor12c, Bor15e].

Mean [BBS84a, BB89b, Bor89g, Bor89h, BB93f, BB97b, BB99z, Bor00u, BB04a, Bor87d, Bor88a, Bor88b, Bor88c, Bor88d, Bor88e, Bos89e, BB90b, BB93g, BB94a, BB04a, BB98e, BB98p, BB14a, BB16o, IP17].

Mean-Value [Bor99-28, Bor00u].

Measuring [DD15].

Means [BB87c, Bor93j, BLM97].

Measures [Bor11f, Bor11z, Bor11-27, Bor11-33, Bor11-34, Bor12-31, BS11a, BBW11, BS12b, BBSW12, BS13].

medal [Bor89a, Bor14b].

media [BB12f, Bor12-27].

medical [Bor14a, HYG09].

Medicine [Sel16].

Medieval [SV14].

Meet [Bor14b].

meeting [Bai17d].

Meetings [Bor11-28, BL16b].

meets [Bor05j].

Melbourne [BR14b].

Memorial [IEE08, SBW84, Bor06a].

Memory [BSZ13].

Mersenne [Cha03].

mess [BB13].

Meters [BB13p, Bor12z, BB12a].

Method [ABT15, BL17a, BL17b, BT13b, BLS17, AR13, ABT16, AP16, BB97a, BB197b, BS17, BH95, BT15, BLS16, DL02, DLL05, DSHZ06, DK16, FN15, Fl05, GS02, HYG09, HD07, HLZ14, HLZ15a, HLZ15b, HLY16, IP17, KJR16, La 09, LSS11, LZ14, Li15, LL13, Mar91, MR96, MPB16, NWW09, NWW10, NFB17a, NFB17b, PT14, PD18, Ray93, Ray97, RS02, WM07, WSDSY15, XH08, YW12, ZH06, ZSQ10, ZSZ16].

Methodology [BBGP95a].

Methods [ABT13a, ABT13b, ABT14a, ABT14b, BB88a, BL93c, Bor97k, Bor00t].
Bor01o, BZ02a, Bor02b, Bor05-32, Bor06-33, Bor08p, Bor09q, Bor09v, Bor09z, Bor10k, Bor10v, Bor12p, Bor13j, Bor13o, BST13, Sch15, ABT13c, BB05, Bor92i, Bor92m, Bor92n, Bor94i, BLN95, Bor95n, Bor95o, Bor98k, BZ06, Bor12o, Bor13i, BZ13, Bor14e, BT14b, BT14a, Bor15g, BST15, Bor16p, DF05, GDT15, HNP10, HL15b, JD13, PHBH12.

**metric** [BK80, BZ96]. **Michel** [Bor17b]. **might** [Bor07-27]. **mine** [BB12i]. **mingle** [LL09]. **Minimal** [Bor89c, Bor89d, Bor90y, Bor90z, Bor90-27, Bor90-28, Bor91a, BFK91, Bor95p, Bor95q, BF89a, BM97a, BK04]. **Minimality** [Bor87c, Bor82b, Bor86d, Bor87b, BM00]. **minimax** [BZ86, Bor14y, Bor16-27]. **Minimization** [BLL94, BLN94, Bor09-29, Bor09-30, Bor90-29, Bor90z, Bor92k, BV09, NWY10, Ray97, XWQ14]. **minimizing** [HL15a, NWY09]. **minimum** [Bor79c, Bor80e]. **Miraculous** [Fin95]. **miscalculate** [BB11c]. **Missing** [Bor09c]. **MKM** [ABD03, BF06b]. **modal** [Bor96e]. **model** [Bor16h, Cam16, ZSZ16]. **Modelling** [Bor13p, BHP14, PHB13, PHB14, Bea13]. **models** [BL92d, Cam16]. **Modern** [Bor90y, BB12x, BB15b, BS11c, BS12a]. **Moderne** [Fal96]. **Modifying** [LL13, BS17, XSW12]. **MODSIM** [Bea13]. **Modular** [BBB97c, BBB00b, BBB04b, BBB16, BBB97a, Bor85b, BB89a, BBB89, BBG94b, Liu00]. **Monochromatic** [Bor79h]. **Monoids** [Bor15f, Bor16i]. **Monotone** [AHLC+17a, AHLC+17b, BBWY11d, BBWY13, Bor72, Bor02b, Bor04o, Bor05-33, Bor05-34, Bor05-35, Bor05-36, BW06, Bor06s, Bor06t, Bor06-34, Bor06-35, Bor06-31, Bor09-28, BHY11, BEY11, BY12c, BBY13, BD15, EB08, BB95a, BBC03, BBW07, BBWY10, BBWY11b, BBWY11c, BBWY11e, BBWY12b, BBWY12c, Bor86b, BF89a, BFK91, Bor98s, Bor02d, Bor02e, BBL04, BW05a, Bor06-32, BW07, Bor07b, Bor07x, BE08, BG09, Bor12i, Bor12j, BY12f, BY12b, BY12d, BY12e, BY13b, BY13a, BY13c, BY14b, BY14c, BY15, BD16b, HLZ15a, ZS14]. **Monotonicity** [Bor09, Bor09k, Bor12x, BS15b, BBB07, BB99b, BBWY11c, Bor82c, Bor06-30, Bor10n, BRS11, Bor12i, Bor12j]. **Monthly** [BB07a, BB12-27, BB09e, BB09f, BB10b, BC15a, BC16, BC18]. **Montreal** [KGO4]. **Moore** [BB12j, BB12i, BB15n, Bor15l]. **Mordecai** [Bor90b]. **Mordell** [BBC14b, BB15a, BB16a, BB16b, BB16c, BB17a, Bor12d, Bor12e, Bor12q]. **Mosco** [BB90a, BB93b, Bor88j, BF89c, BV93, BV94a]. **most** [Bor16b]. **Motivation** [Bor09-29]. **Movements** [BB13r]. **movies** [Bor15b]. **MR** [Bor81a]. **MR0716121** [Zal86]. **MR0991866** [BBB97a]. **Multi** [Bor96e, Bor97f, BMM02, Bor97f, Bor16h]. **Multi-dimensional** [Bor97i, Bor97f]. **multi-disciplinary** [Bor16h]. **multi-institutional** [Bor16h]. **Multi-modal** [Bor96e]. **Multi-variable** [BMM02]. **Multidimensional** [Bor96f, Bor96g, Bor96h, BH06, BTBT88, Bor97p]. **Multifunctional** [Bor98k, BZ99a]. **multifunctions**
[Bor94b, BF95a, Bor95p, Bor95q, BMS99a]. Multimedia [BMPR02].
Multimodal [Bor97m]. multiobjective [MPB16]. Multiple
[BBBL99, BBK00, Bor10y, BZ11, BBBL98a, BBBL98b, BBK01, BBBL01, BC10, BDT16, JY12]. multiple-zeta [BC10]. Multiplier [Bor80b, Bor81d]. multipliers [Bor80c, BZ16]. Multivalued [Bor97m]. Multivariable [Bor00r, Bor01p, Bor01q, Bor01r]. Multivariate [HYG09, BL92b]. Music
[Bor12r]. Musicians [BB16m]. My
[Bor08q, Bor12s, Bor07-28, Bor07-29, Bor07-30, Bor08u]. Mysteries
[Bor11-30].

N [BC96, Odl11]. National [Bor05i]. NATO [SBW84]. natural [RP09].
Nearest [BG15b, BG16b, Bor98a, BF89b]. Necessary
[Bor82b, BTZ98, BZ88]. needs [Bor13a]. negative
[BBWY11e, BY12f, LL13]. negative-inffimum [BBWY11e]. Nested
[BdB91]. Network [Bor99b, Bor99c]. Networking [Bor98c]. Neumann
[BB93a]. Nevanlinna [Bor03p]. Neverending [BvdPSZ14]. Newcastle
[BB17a]. Newfoundland [IEE08, SBW84]. Newly [BB12k]. News [BB12a].
Newton [BW97]. Next [Bor02c, Bor02q, BB16j]. NI [BE08]. Nielsen
[BS15b]. NJ [Bor09b]. NMR [BMN00].
No
[BB13i, BM97b, BB13e, BKW02, CAM16, ZAI86, BB12x]. no. [ZB02a]. Nobel
[Bor14b]. Non [Bor10y, Bor05-32, Bor06-33, Bor13o, Bor61v, Bor16v, Bor16x, Bor16y, AB12, AB13, BBWY11b, BBWY12b, BZ94, BE08, BS10a, Bor15r, LL13, Sel16, BM07c]. Non- [Bor05-32, Bor06-33]. Non-Convex
[Bor61u, Bor16v, Bor16x, Bor16y, Bor13o, AB12, AB13].
non-expansive [BS10a]. Non-Linear [Bor72]. non-negative [LL13].
non-reflexive [BBWY11b, BBWY12b, BZ94, BE08]. Non-smooth [BM07c].
non-Western [Sel16]. nonattaining [BK01]. Nonconvex
[ABT15, Bor10k, Bor13q, ABT16, BZ98, BJ98, Bor12o].
nondifferentiability [BG09]. Nonexpansive
[BS83, BS84b, Bor90-28, BR11]. Nonlinear
[BB13j, BB13k, BB14a, BB14j, BCJW13, BG87]. Normality
[BBC+11a, BBC+12b, BBC+12c, BBC+12a, BN84]. normed
[BFG87, BRS92, BFV94, Bor94c, Bor95t, BLM00]. norms
[BY84, BV93, BV94a, BJS02, BGV02, BBL10]. notation [B11e]. Note
[BB86a, BM97b, Bor76b, Bor80d, Bor82d, Bor82c, Bor83d, BF94, Rei02, Tha02]. Notes [Bor06-36, HC09]. notion [JN03]. Notions
[Bor87c, BB30a, Bor86d, Bor87b]. novel [Ade12]. NSW [BB17a]. Nuclear
[BB14h]. Null [BM98b, BF95c, Bor95a, Bor95b]. Number [Ber88, BB87d, KG04, Wim88, BB13t, BCJW13, BCJW13, BB93d, BB96c, BB98a, BSZ13].
Numbered [Bor11d, Bor11h]. Numbers [Ade14a, ABBB13, BB88e, BBD97, BBxxa, BBDD0, BBDD4, Bor09r, Bor13-27, Bor13-28, Bor16-30, Bor16-31, BBCP04, BB11e, BB12a, BB13j, BB14k, BCJW13, BBD89, BB90d, Bor11i, Bor13h, Bor13u, Bor13v, Bor13w, Bor13x, Bor13y, Bor13z, Bor14w, Bor14x, BBDD6, Bor16q, Bor16s, RP09, Bai91, Lor90]. Numeracy [BB12-29]. Numerical [BB08e, BB08b, BB12a, Bor99t, BS00, Bor00s, Bor09y, BB11b, Bor05-40, MR96]. Numerique [Bor00o]. Nurturing [Bor03-31].

O [BB13s]. Obituary [BBS17]. Objectives [Bor91h, Bor92e]. Objects [Bor06s, Bor91e, Bor91f, Bor91g, Bor91j, Bor91k, Bor91l, Bor91m, Bor92f, Bor92g, Bor05-33, Bor05-34, Bor05-35, Bor05-36, Bor06-34, Bor06-35]. Observations [BB92b]. Odd [BS16b]. Odds [BR14b]. Odyssey [BB12p]. OEIS [Bor15d, Bor16a, Bor17a]. Official [Bor03-32]. Often [Bor15a]. Oil [BB12e]. Old [BB14p, BB12d, BB15n, Bor15l]. Once [BB13t, BB15o]. One [BBB97c, BBB00b, Bor03-33, BBB04b, BB16, BB89a, BB90d, BF95a, BCFR04]. One-dimensional [Bor94b, BF95a]. Online [BBS+15a, BB97b, Bor97n, Bor01f]. Only [BB13q]. Ontological [BB15b, BB15i]. Operator [Bor74, BB14b, BB15n, Bor15l]. Operators [AHLC+17a, AHLC+17b, Bor72, Bor04o, BB06, Bor06t, Bor06-31, BBY11, BB08, BB99b, BBW07, BBWY11b, BBWY11d, BBWY12b, BBWY13, Bor82a, BPT84, Bor84e, Bor86e, Bor86b, BF89a, BF91, Bor92o, BT92, Bor98n, BRLZ00, BLZ01, Bor05-33, Bor05-34, Bor05-35, Bor05-36, Bor06s, Bor06-34, Bor06-35, Bor06-32, BBW07, Bor07b, Bor07x, BE08, BR11, BEY11, Bor12, Bor12j, BY12f, BY12e, BY13, BY13a, BY13c, BY14c, RZ15]. Opinion [BBS13a]. Opportunities [BB13h, BBC+14a, BB14a]. Optimal [NFB17b, Pos13]. Optimality [BW79a, BW79b, BW81c, BW82a, BW82b]. Optimisation [Bor17b, BM07c, JN03]. Optimization [A015, ABT13b, ABT14b, AHLC+17a, AHLC+17b, BBLZ13, Bor74, Bor78a, Bor99a, BL00a, Bor02b, Bor12-29, Bor12-30, Bor16l, Bor16m, BL16a, SZ81, SI16, Tod03, AP16, BBL99, BBC03, Bor77a, Bor81b, BN84, BZ91, BZ93, BL94b, BTZ98, BL06, BL16b, DHSZ06, MP18, MPB16, NFB17a, WSdSY15, XH08, XS02, YW12, ZH06, ZSQ10, Zho12, ZSZ16]. Option [BCM03]. Order [BD86, Bor87e, EB08, BB84b, BB84d, BB86e, BB87a, BD89, Bor92h, Bor92i, Bor93f, Bor93g, BF93b, BN94]. Order-bounded [Bor86e]. Orderings [Bor74]. Organic [Bor96i, BBJC97, BJ12, Bor97e, BBC+97b, BBJC97]. Oriented [BD11]. Origin [Bor95i, Bor06i]. Origins [BS14b, BS14a]. OSCAR [IEE08]. Oscillatory [BB10a]. Other [Bor00j, Bor00k, Bor05-42, Bor05-43, Bor05-44, Bor16n, GS08, BBMW17, Bor92o, Bor93k, BF97, Bor05-45, BL16a, LI16b, Tre13]. Out-of-sample [BBLZ14]. Outlook [BB01a]. Over-Fitting [BBLZ13]. Overfitting [BBS+16a, BBLZ17, BBLZ14, BBS+15a, BBL+16b, BBL16a, BBL16c]. Overseas [BB15l]. Overview [Bor09-29]. Oxford


P [Bor92c], PACBB [ZH06], Pacific [Bai91], packing [BB16l, CKM +16, Via16], pages [Sha05], pain [BB12k], Paleo [BB12s, BB16e], Paleo-Mathematics [BB12s, BB16e], Pamphlet [BBB03], Paper [Bor14u, Bor14v, Bor81a, Zal86], Papers [BB14h, Bor11b, Bor11c, Cam16, KG04], Paradox [Bor04-32, BB15f, BB15p], Parallel [BB08e, Bor00t, BB09b, BJCW13], Parameter [BCF04, BC04a, ZSZ16], parameters [LLC +95], Parametric [BBB06b, Geo05], Pareto [AR13, Bor80a, Bor83e], Paris [CGM95, Bai17d], Part [AHL17a, BB93e, Bor16b, BL92d, Bor03n, Bor03o, Bor08f, Bor12d, BL92e, Bor12-29, Bor13-33, Bor13-34], partial [Bor74, MR06], Partially [Bor66, BL92a, BL92d, BL93b, Bor97o, Bor98l, Bor98m, BT99, Bor99u, Bor00v], Partly-finite [Bor66, BL93b], partitions [RF09], Parts [Bor15h, pass [BB12a, BB12b], Past [Bor07a, Cam16, Bor08r], Patents [BB14b], pathological [BBWY11b, BBWY12b], Paths [Bor3m, Zei05, BBG04a], perfect [Bor80d], Performance [Bor98b, Bor98i, Bor99w, Bor99-29, Bor99-30, BBx00, Bor00b, Bor03r, Bor03s, Bor03t, Bor03u, Bor03v, Bor03w, Bor04b, Bor05x, Bor05y, Bor06-27, Bor06, Bor08l, Bor08r, Bor10t, Bor11u, Bor11v, Bor11w, Bor11x, Bor11y, Bor11d, Bor12a, Bor12b, Bor12d, Bor12t, Bor12u, Bor12v, Bor13a, Bor13b, Bor13c, Bor13d, Bor14a, Bor14b, Bor14t, Bor14z, Bor15k], Pi [BC15b, BC15a, Bor16n, Bor16c, BDD16, BC16, Bor16b, BB16, Fin95, Gai16, Gui16, Sei01, AL10, BBP97, BB97a, BCC +12a, BB14c, BB14j, BB14n, BB84d, Bor86f, BB87a, Bor87g, Bor87f, Bor89b, BB89, BB01e, Bor08a, BB14c, BB14j, BBM17, Bor88, BB88f, BB91e, BB96c, BM06, Bor12w, BB16v, Abb00, Ask88, BB93g, Cas99, Rob06, Wim88], Pioneer [BB16h], pitfalls [Bor94d, Bor94e, Bor94f, Bor95g, Bor95h, Bor95i,
Bor95j, Bor95k, Bor95l, Bor95m, Bor96c. Plan [Bor04p, Bor05k, Bor05l, Bor05m, Bor05n, Bor05o, Bor06l, R+05, Bor03y, Bor03z, Bor06-28]. plane [Bor79h, BNSW10]. Planet [Bor13s, BB12-28, Bor06f]. plates [BB91d].

Plausible [Bor93c, Bor93d, Bor03-27, Bor03-28, Bor03-29, Bor03-30, BB04b, Bor04-27, Bor04w, Bor04x, Bor04y, Bor04z, Bor06-29, Bor10a, HF05, Hao05, Zei05]. playing [BB12o]. Please [BB13l]. Pleasure [Bor02l, Bor02m, Bor05a, Bor16f]. Ploue [BC96, Fin95]. Point [BB88a, BLT17, BBC^+11b, Bor84a, BB91b, BLT15, BLT16, HD07]. Points [Bor77c, Bor84d, Bor83e, Bor86c, Bor88k, BF89b, Bor92l, Bor92m, Bor92n, BF93a, BW97a, BKW02, BY12e, BY13c, BG15b, BG16b]. Poisson [BB13d, BBCZ13, BBKL16, BBK17, TB00]. Pol [BB07c]. politicians [BB12-28], politics [BB12b, Bor13c]. polyhedra [Bor00r, Bor01p, Bor01q, Bor01r, BBM02]. polylogarithmic [BBP97, Bor97l, GG07]. Polylogarithm [BBKL99, Bor97i, GG07]. Polilogarithm [BBKL16, BBKL17, HC09]. Polynomials [BBKL16, BBKL17, HC09]. Poorten [BSZ13]. Portfolios [BB91b, BLT15, BLT16, HD07]. Positive [DABY15]. Possible [Bor07w, Bor07-32, Bor08n, Bor08o, BBxxc]. postcards [Bor91d]. Powers [BB07a]. practical [BL91d]. Practice [BBS16b, BJL^+08]. precedent [BB14b]. Precision [BB08a, BB08e, BB08b, BB13h, BB90c, BL92e, BB92a, BB09g, BB09b, BB11b, BB12, BB15j, Bor10q]. Preconditioned [MR96]. Preface [AAB12, AHLC^+17a, AHLC^+17b]. prefer [Bor15k, BC15b, BC15a, BC16]. Press [Bej94, Dev9x, Fab89, Geo05, KPS16, KPS17, LS00, QR07, YS00]. Presses [Bor89c]. Prepared [BB15o]. prescribed [BMW97, BW03]. Presence [Bor99e, Bor99f, Bor99d, Bor16z, Bor13-33, Bor13-34, Bor13-32, BZ13, BLT15, BLT16]. Present [Bor07a]. Presentation [Bor05e, Bor89a]. President [Ano16]. presidential [BB12z]. Press [BB03g, BC96, Bor06a, Bor09b, BO11b, BS14a]. Previously [BBMW11, BBMW13, BBMW16]. Price [Bai91, Ber88]. prices [BCM03]. Primality [Bor94g, BBPG96, BW97b, BMS13, BSM13]. primes [Cha03]. Princeton [Bor09b, BO11b, HDG^+15]. Principle [Bor03-33, Bor04-31, BHP14, Geo05, YS00, Bor83b, BB84f, Bor86g, BP87, Bor87h, Bor87i, Bor87j, Bor90m, Bor90n, BCM03, BCFR04, Fab89, KPS16, KPS17, LS00, QR07]. Principles [BBS16b, BMS99b, Bor06r, Bor06s, Bor06t, Bor06u, Bor09-30, Bej94, BTZ99, BV09]. Prize [Bor03p, Bai16a, Bor14b, BE16]. Prizes [Bor03p]. Probability [BBLZ13, BBLZ17, BCM03]. Problem [ABT15, BB07b, BB07a, BB08f, BB09e, BB10b, BB12-27, BD86, Bor13d, Bor13e, Bor13h, WSL16, ABT16, BB16l, BW81d, BD89, BGL93, CKM^+16, GDT15, LLS11, PT14, Pos13, Ray97, Via16, Vir14, Zho12]. Problems [AJB86, ABT13a, ABT13b, ABT14a, ABT14b, ANO^+83, AJ86, BB09f, BB96a, BL87, BSZ^+83, BB85, Bor85a, BN86, BB87c, Bor93l, BB93c, BLN94, Bor96j, BDT96, BBS^+97, BPB99, Bor05b, Bor08p, Bor09c, Bor09v, Bor09-29, Bor09-27, Bor09-30, Bor09-28, Bor09z, Bor10k, Bor10v, Bor10w, Bor12p,
problems [BT15, Bor15g, Bor15r, HD07, HLZ14, JD14, KJR16, LZ14, Li15, MPB16, NWY10, Pea07, PD18, WSdSY15, YW12]. Proceedings [Bor96i, L09, BBJC97, HY14, ABD03, BF06b, CGM95, RZ15]. process [Bor83a, Zal86]. processes [Bor86a, MTCB98]. processing [BJCW13]. Product [BPB99, BB83]. productive [Bor03g]. products [RZ15]. Professor [MW16]. Program [BW79a, BW79b, BW79c, BW81a, BW82a, BW82b, BB11c]. Programmed [BB11c]. Programming [Bor01o, Bor05-32, Bor06-33, BL15, TB80, Bor76a, Bor79a, Bor81a, Bor81d, Bor85c, Bor83f, BW86, Bor87k, Bor88l, Bor91b, Bor905, Bor90d, Bor91b, Bor91c, BL92c, BL92d, BB92, Bor93e, BL93b, Bor94i, Bor95a, Bor95o, BB12, BY14, DF05]. programs [Bor79c, Bor80e, BK83, Bor91h, Bor92e]. Progress [BB08b, BB11b, Bor12x, BY12c, BY15]. Progressions [Zah06]. Projected [BL17a, BL17b, DF05, LZ14, WM07, HNP10, HLZ15a, HLZ15b, HL15b, HLY16, PD18, ZH06]. Projection [BB96a, Bor98a, Bor99a, Bor09v, Bor10d, Bor10k, Bor10v, Bor10w, Bor12p, Bor13o, BST13, BB93a, BB94a, BBL97a, BLY13, BY14, BST15]. Projections [BB97a, BBL97b]. promises [Bor94d, Bor94f, Bor95h, Bor95i, Bor95j, Bor95k, Bor95l, Bor96c]. Proof [Bor02i, Bor02m, Bor05a, Bor07g, Bor07i, BS07, Bor08g, BS08, BB11j, Bor12-32, Bor16f, Cvi10, GS08, HD12, Ara07, BB08c, Bor77b, Bor94a, Bor06h, Bor08d, Bor08e, Bor09a, Bor09e, Bor09f, Bor09g, Bor09u, BY12f, Bor14y, Bor16-27, IL09]. proofs [Ade13, GUI08, GI16]. Proper [Bor77c, JN03, Yan94, Zhu91]. properly [Zho12]. Properties [Bor00m, BBEM10, BT00, Bor82a, Bor90g, Bor90h, Bor90i, Bor90k, Bor90j, Bor90l, Bor90a, Bor90-40, Bor90-41, Bor90-42, Bor90-43, Bor91d, Bor91q, Bor91r, Bor91s, Bor91t, Bor92a, BB01c, BNSW11, Mar91]. property [BBL99, Bor82e, Bor88j, BS86, BI96, BG87, BGW98]. Proximality [Bor06a, Bor07y, Bor07t]. Pseudo [BBLZ14, BJCW13]. Pseudo-mathematics [BBLZ14]. pseudo-random [Bor91a]. Pseudoconvex [QR07]. pseudorandom [BB13j]. PSLQ [BB09d]. Public [BB14g, Bor03h, Bor12-27]. Publication [Bor98a, BS97b]. Publishing [Bor99y, Bor96d, Bor97h, Bor97i, Bor97n]. Putnam [Bor77d]. puzzles [Bor15a]. QC [KG04]. QCQP [PD18]. PQQC [Pos13]. Quadratic
quadratically [BB86c]. Quadrature
[BB06a, BB08d, Bor06j, Bor06k, Bor06m, Bor06n, BY06]. qualification
[BW79b, BW82a, BW82b, BW86]. Quantitative [Año15, Koh01]. quantum
[Cvi10]. Quatertially [Bai88, Bai16b, TK97]. Quasi [BL92c]. quasiconvex
[BBP03]. quest [BBBP97, BBxxc]. question [BB14l, MR11]. Questions
[Bor03-34]. Quinn [BBC09].

R [Odl11]. Rachford [AB12, ABT13a, AB13, ABT13b, ABT13c, ABT14a, ABT14b, ABT15, ABT16, BS10b, BS10c, BS10d, Bor10i, Bor10j, BS11b, Bor11q, Bor11r, BT13a, BT13b, Bor13i, Bor13q, BT14c, Bor14e, Bor14f, BT15, Bor15g, Bor15r, BG16a, BLS+16, BLS+17]. radicals [BdB91].

Rainfall [Bor13j, BHP14, Bor13p, PHBH12, PHBH13, PHB13, PHB14].
Ramanujan [BB96c, AB15, AAB12, BBB97a, BBC95b, BR01, Bor85b, Bor86f, BB87a, Bor87g, BB87f, BB87b, Bor87i, BB88d, BB88f, BB89a, Bor89f,BB89, Bor90-29, Bor90-30, Bor90-31, Bor90-32, Bor90-33, Bor90-34, Bor90-35, Bor90-36, Bor90-37, Bor90-38, Bor90-39, Bor91j, Bor91k, Bor91l, Bor91m, BB91e, Bor91o, Bor92f, Bor92g, Bor92j, BB93d, Bor93n, BBG94b, BB96c, BB97c, BBS00b, BB01e, Bor03d, Bor03e, Bor03f, Bor04-30, Bor04-29, Bor04-28, BCF04, BC04a, BB04b, BL05, Bor05i, Bor06i, BL08, Bor10x, Bor10a, Bor10-27, Bor11-28, BBGW11, Bor11-29, Bor11-31, Bor12w, BBB16, Bor16d, BB16p, Lin00, Lor08, BB91d]. Ramanujan-type
[BB87a, BB88d, BL08]. Ramble [Bor10-28, Bor10-29, Bor11-32]. Rand
[BBC09]. Random [BB13a, BNSW10, Bor10-28, Bor10-29, Bor11-32, BS13, Gan14, BB13b, BB97a, BJCW13, BCJW13, BL05, Bor10c, BSW11, BNSW11, Bor12a, BSWZ12, BR13a, BS15, BS16b, BS16a].

Randomness [BBBR16, BBBR17, Gan17]. Range
[Rom04p, Bor05k, Bor05l, Bor05m, Bor05n, Bor05o, Bor06i, R"05, BW81c, BFKL01, BFL02, Bor03y, Bor03z, Bor06-28]. Ranking
[BBSL17b, BBSL18, BBSL17a]. rapid [BB97]. rapidly [AL10, BB83].
Rate [BLT17, BLY13, BLV14, BLT15, BLT16, HL15b]. Ratio [Ade14a].
Rational [BZ87, BB87b, BZ92, BB98b, BB98c]. Reactions [BB14h]. Real
[ABBB13, Bai91, BCF04, Bor13-27, Bor13-28, Bor90, BFG87, BB90d, BB91b, Bor04-30, Bor10z, Bor14w, Bor14x, Bor16q, Bor16r, Bor16s]. Real-Parameter [BCF04]. Realistic [BST13, BST15]. Reality
[Bor05-39, BB12p, BB13g]. Really [BB14e]. rearrangement [BLZ01].

Reasoning
[Bor93c, Bor93d, Bor03-27, Bor03-28, Bor03-29, Bor03-30, BB04b, Bor04-27, Bor04w, Bor04x, Bor04y, Bor04z, Bor06-29, Bor10a, HF05, Hoa05, Zei05].
Receive [BE16, Bai16a]. Reconstruction
[Bor09z, Bor92o, Bor93k, BLN95, BLLN95, BLN96, LLC+95, MTCB98]. reconstructions [MTCB99]. Recurrence [BS08, BBCM07b]. recurrences
[BBS14a]. Recursion [BS07]. Recursions [BB06b]. Reduced [BB84e].
reduction [BW81d]. Refined [BBFG01, War03]. Reflection
[BST13, BT14b, BT14a, Bor16p, BST15, Bor15r]. reflexive [BBWY11b, BBWY12b, Bor93a, BZ94, BTZ97, BE08, BV10a, Bor13f, Bor13g, Bor13h].
reflexivity [BB90a]. region [ZSZ16]. regional [YJ12]. registration [HYG09]. Regular [Bor84d, BBEM10, Bor86c]. regularity [BB99a, BBL99, BBT00, BZ88, BF94, BZ96, BLT15, BLT16].

Regularization [BL11, HLZ15b]. regularizations [BV95a]. Regularized [WSL16, MTCB99, XWQ14]. Regularizing [BW81b]. Regulatory [BB15m]. Reich [Koh01]. Reinhart [BB13m]. Related [Bor02b, BHL16b, BBL99, BBT00, BZ88, BLT15, BLT16]. relating [BW97b].

Relations [BB99d, Bor80b, Bor02a, BS94b, BB95d, BB01c, BSZ13, BHL17]. relating [BW97b]. Relation [Bor09p, Bor09q, Bor10r, BL00b, BY12d, BY13b].

Relationships [BL91b, BV93, BV94a]. relative [BB13e, BL92c, BG03a]. Relaxed [RS02]. reliable [BB14k]. Remark [Osb05]. remarkable [BB90b, BB01c]. Remarks [BG16c, BG16d, BEO77, Bor81a, BG15c]. remembrance [Bai17d]. Remote [BLM07, BM07b, Bor09w, Bor09x, BJJ12]. renorming [BF93c, BV95b].

replace [BB16n]. replication [Gui17]. Reply [Gan17]. Report [BBC09]. Resources [BB01c]. Rememberance [Bai17d]. Remote [BLM07, BM07b, Bor09w, Bor09x, BJJ12]. renorming [BF93c, BV95b].

replace [BB16n]. replication [Gui17]. Reply [Gan17]. Report [BBC09]. Resources [BB01c]. Rememberance [Bai17d]. Remote [BLM07, BM07b, Bor09w, Bor09x, BJJ12]. renorming [BF93c, BV95b].
[AHLC\textsuperscript{+}17b, BBBL99, BBBL01, Bor11-28, BS11d, BS11e, BL16a, AAB12, Bor83c, Bor83f, BBFG01, Bor12s, BL16b]. **SPECT**

[BNCB99, BS97a, Bor02r, LLC95]. **spectra** [BMN00]. **Spectral**

[Bor87k, BBT92, BTBT88, Bor90c, Bor90d, Bor91b, Bor91c, BRLZ00, BLZ01]. **spent** [Bor10-30]. **Sphere** [BB16l, BKW02, CKM\textsuperscript{+}16, Via16]. **Spheres**

[BLS\textsuperscript{+}17, BLS\textsuperscript{+}16]. **spin** [BBCM07a]. **Spline** [SBW84]. **Springer** [Tod03].

**Square** [BB12s, BB16e, BRxx]. **Squares** [Bor01g, Bor02h, Bor02i, BC03, BC04b]. **Srinivasa** [BB96c, Bor12w].

**St** [IEE08]. **Stability** [Bor84d, Bor86c, BM09, BM10, BW81a, BS97a, MTCB99].

**Stage** [Bor07z]. **Standing** [JWDS\textsuperscript{+}14]. **Starshape**

[BE076, BEO77, Bor78c]. **Static** [BBSZ87, BBSZ88]. **Statistical** [BSW82].

**Statistically** [Han14]. **Statistics** [BB09a, BB15g, BB09c, BB11f].

**Staunch** [BW05b]. **Steepest** [RS02]. **Steiner** [BO11b]. **Step**

[BB88a, BSW13, SI16, Bor10e, SD15, XC11]. **steplength**

[Pos13, Ray93, XSW12]. **stepsize** [DABY15, MP18]. **Still**

[Bor01e, Bor02s, Bor02t, BB13k, BB14c, BB14j, BB14m]. **Stochastic**

[BL94b, BL94d, BBT00, Bor80e, Bor12w]. **strongly** [Bor78b]. **Strong**

[BB98a, Bor05-40, H212]. **Strongly** [Bor82b, BZ88]. **Suggest** [Cam16]. **Sum**

[BB17a, BY13a, BY14c, BB16a, BB16b, BB00b, BB12b, BY13b]. **Sums**

[BB94b, Bor96f, Bor96g, BBK00, Bor01g, BB05g, Bor06-31, Bor12q, BGM\textsuperscript{+}13, BBG94a, BR13d, BBCZ13, BBC14b, BB15a, BB16c, BB08, BBT85, BBS89, BBG95c, Bor95f, BB96b, BG96, BB97d, Bor97l, BB98, BB02h, Bor02i, BC03, BC04b, Bor06-32, Bor07x, BZB08, Bor12d, Bor12e, BBS13b, BBS14b, BBS15b, GG07]. **sucient** [Bor76b]. **sucient** [Bor82b, BZ88]. **Suggest** [Cam16]. **Sum**

[BB17a, BY13a, BY14c, BB16a, BB16b, BB00b, BB12b, BY13b]. **Sums**

[BB94b, Bor96f, Bor96g, BBK00, Bor01g, BB05g, Bor06-31, Bor12q, BGM\textsuperscript{+}13, BBG94a, BR13d, BBCZ13, BBC14b, BB15a, BB16c, BB08, BBT85, BBS89, BBG95c, Bor95f, BB96b, BG96, BB97d, Bor97l, BB98, BB02h, Bor02i, BC03, BC04b, Bor06-32, Bor07x, BZB08, Bor12d, Bor12e, BBS13b, BBS14b, BBS15b, GG07].

**Super** [BR13a]. **Super** [BZ91, BZ93]. **Supercomputers** [BBG95a].

**superrelaxation** [Pos13]. **support** [BV96a, BV96b]. **supportability** [Bor79g]. **Supportless** [BT84, BT85]. **Surmise** [DD15, Bor02g]. **Surprise**

[Bor99a, Bor99d, Bor00p, BB00q, BBM00, Bor04v, Bor04-32].
Surprising [BBB08]. **Survey** [BL93c, Bor90a, Bor90-40, Bor90-41, Bor90-42, Bor91q, Bor91r, Bor91s, Bor91t, Bor92b, Bor95t, BV95b, BW97b, BZ99b, BZ02a, BZ02b]. **Surveys** [SV14, BR01]. **SVM** [SD15]. **Swedroe** [Swe17]. **Sylvester** [Bor79f]. **Symbolic** [Ade11, Bor98h, Bor00t, Bor05-41, BH06, Bor09t, BH09, BBK14, Bor97g, Bor98q]. **Symbolically** [BB96b, Bor97p, Bor97u, Bor97v, BB05c]. **Symbols** [Bor90t]. symmetric [DABY15, JD13]. **Symmetry** [Bor16z, Bor13-33, Bor13-34, Bor13-32, BZ13]. **Symposium** [IEE08, CGM95]. **Systems** [Bor84d, Beal3, Bor86c, Bor92o, Bor93b, Bor93k, BS97a, BR16, DABY15].

tails [BCP05, BC10]. Talk [Bor93n, Bor07v, Bor08l, Bor08m, Bor09z, Bor11w, Bor11x, Bor11y, Bor11-28, Bor16n, Bor16t, Bor89a]. Talking [Bor97q, Bor97r, Bor97s, Bor97t, Bor98b, Bor99-29, Bor10-30, Bor12-27]. **Tangency** [Bor99x]. Tangent [BO76, Bor78c, Bor78a, AL10, BB84f]. Tangential [BS85]. Tanh [BY06]. Taylor [Nim15]. teachers [BZ99b]. Teaching [Bor79b, Bor13g]. Technical [BZ05, Bor94o, BZ99a, GS02]. **Technology** [Bor98e, Bor99e, Bor99f, Bor99d, Bor00n, Bor07f, Sel16, BS99]. Telco [Bor10-30]. telelearning [Bor00w]. Telstra [Bor10-30]. Ten [BBK06, Bor05b, Bor09-29, Bor09-27, Bor09-30, Bor09-28, Bor09z].
tentative [BB12x]. ternary [Ade10]. Terry [Ano15]. Tertiary [Bor11g, Bor11-36]. test [BB12g, BB12l]. Testing [BBLZ13]. Texas [BB13].
textbook [BB13]. Texts [Ber88]. th [BB84d, Cra12]. their [Bor88m, Bor88s, Bor89d, Bor95p, Bor95q, Bor14d, RZ15]. **Theorem** [BBWY11a, Bor80b, GN16, TB80, Aras07, BBWY12a, BO11a, Bor79f, Bor80e, Bor81e, Bor81d, BZ86, Bor88g, Bor88h, Bor88i, Bor89c, Bor90m, Bor90n, BW08, BD03, Bor14y, Bor16-27, Dev9x, Koh01, MW12, OBB+96, Rei02, BB13c, Bor79b, Bor13g]. théorème [Dev9x]. Theorems [Bor99-28, Bor00u, Bor12-29, Bor12-30, Bor14g, Bor14h, Bor14i, Bor14j, Bor14k, Bor14l, Bor14m, Bor15h, Bor16-28, BB99a, BS17, Bor77b, Bor79a, Bor81c, Bor85c, Bor87m, BT92, BG95, Bor98o, BY13a, BY14c]. Theoretical [Ba012]. theories [BBG95b]. Theory [AHLC+7a, AHLC+17b, BB15e, Ber88, BB87d, BZ02a, BM07d, Bor09d, Bor12d, Bor12e, BR12, BY12c, Bor12-29, BR13b, Bor16u, Bor16v, Bor16w, Bor16x, SBW84, Tod03, Wim88, BB10, BB13t, BBC14b, BB15a, Bor84a, BL92c, Bor94n, Bor95w, BB98a, BM07c, BY12e, BSZ13, BY13c, BY15, Cy10, KG04, BS86]. Théra [Bor17b]. there [BB12-29, Bor14a]. Theta [Hir17, AR15, AAW06, Bor87l, HGB93, LL01, Lin00, XY12].

**Theta-Function** [Hir17]. Things [Bor13-27, Bor13-28, BB11f, Bor12y, Bor13t, Bor13u, Bor13v, Bor13w, Bor13x, Bor13y, Bor13z, Bor14w, Bor14x, Bor14q, Bor16r, Bor16s]. Thinking [Bor04, BB12-28, BB93g, Bor94]. Thirty [BB05d, BB06c, Bor10-31]. Thirty-two [BB05d, BB06c]. **Thompson** [Bor07-27]. thousand [BB12v]. thousand-digit [BB12v]. threatens [BB13]. Three [Bor93p, Bor97u, Bor97v, Bor98q, Bor03-34, Bor07-31, BS13, BB93d].
Variable [BBM02, KJR16]. Variant [YS00, LS00]. variants [Bor79]. Variational [Ano15, BZ97, BMS99b, Bor99v, Bor00v, Bor03-33, Bor04-31, BZ05, Bor06r, Bor06s, Bor06t, Bor06u, BZ06, Bor07n, Bor08i, Bor08j, Bor09-29, Bor09-27, Bor09-30, Bor09-28, Bor09z, Bor13-33, Bor13-34, Bor13-32, BZ13, Bor16z, Geo05, YS00, Bor86g, BP87, Bor87h, Bor87i, Bor87j, Bor90m, Bor90n, Bor97o, Bor98l, Bor98m, BTZ99, Bor99u, BCFR04, Bor04, Bor10p, Bor13-30, BZ16, Fab89, KPS16, KPS17, LS00, QR07]. Variations [Bor05c, BB05d, Bor10b, Bor10-31, BB06c]. various [BBP97, Bor92h, Bor92i, Bor93f, Bor93g]. vector [BBP03, BY84, BN84, BZ91, BZ93, JN03, KPS17]. vector-valued [BBP03]. Vectors [BSxx, BL92a]. Vera [BO11b]. Verifiable [BZ88]. version [BWB97, Koh01]. versus [BB12p]. vertex [KMY00]. very [BB83, Bor14y, Bor16-27]. via [Bor87k, BBT92, BG97b, BF93c, BFG03]. view [BB17b]. Views [DD15, BS97b, Bor97n, Bor98c]. vii [Bai91]. viral [Bor15a]. Virtual [Bor95u, Bor95v, Bor96k, Bor97w, Bor98r]. Viscosity [Bor94n, Bor95w, BZ96]. viscous [BFB17b]. Visibility [BEO76, BEO77]. vision [Bor94o]. Visual [Bor14g, Bor14h, Bor14i, Bor14j, Bor14k, Bor14l, Bor14m, Bor15h, Bor16-28]. Visualisation [Bor05-42, Bor05-43, Bor05-44]. Visualization [Bor05-45, Bor14z]. visualizing [BBW97]. vita [Bor08a]. Vol [BM97b]. volume [Bor06a]. volumes [Bor00r, Bor01p, Bor01q, Bor01r, BBM02]. vs [BB13f, BB15e]. vu [Trei13].

Wadsworth [Bai91]. wait [BB13c]. Walk [BSW13, BNSW11, Bor15n, Bor16e]. Walking [ABBB13, Bor13-27, Bor13-28, Bor16-29, Bor16-30, Bor16-31, Bor13t, Bor13u, Bor13v, Bor13w, Bor13x, Bor13y, Bor13z, Bor14w, Bor14x, Bor14y, Bor14u, Bor16q, Bor16r, Bor16s]. Walks [Bor10-28, Bor10-29, Bor11f, Bor11z, Bor11-27, Bor11-33, Bor11-34, Bor11-32, Bor12-31, Bor10e, BNSW10, BSWZ11, Bor12a, BSWZ12, BS13, Bor14a, BS15, Bor15o, Bor15p, Bor15q, BS16b, BSV16, BS16a]. Walter [Bor90b]. warming [BB12c]. Washington [Coh15]. Watson [Bor11c]. Way [BB12x, BB13i, BB87c, Bor15t, Bor11a]. Ways [Bor94p]. Weak [Bor78a, Bor79g, BF93c, BFG03]. Web [Bor96b, Bor97a, Bor97b, Bor97c, Bor99y, Bor96d, Bor97e, Bor97d, Bor97h, Bor97i, Bor98r, BBB+96a, Bor98a]. weeks [Bor10-30]. Welcome [Bor02r]. Well [BB15i]. Wellesley [Odl11]. were [BB12-28]. West [Bor05]. Western [Sel16]. WestGrid [Bor01m, Bor03-32]. Where [BB11g, BB15p]. which [BF93a]. Who [BB91d, Bor15b, Bor15t, BWW97, Bor16d]. whose [BFG03, BS10a]. Wide [BBB+96a]. Wiersma [BWY10, MR11]. Wightwick [Bai16a, BE16]. Wigner [BBS13b, BBS14b]. Wijsman [BV93, BV94a]. wild [Bor02g]. Wiley [Bor88]. Will [BB16n, BB15n]. William [Bor77d]. Wilson [BB13s]. winners [Bor14b]. Winter [BM97b]. wireless [Bor00w]. wishing [Bor01f]. within [ABMMY13, ABMMY14]. without
References


Asperti:2003:MKM  Andrea Asperti, Bruno Buchberger, and James Harold Davenport, editors. *Mathematical knowledge management: second inter-
REFERENCES


REFERENCES


REFERENCES


[AW97] Victor Adamchik and Stan Wagon. A simple formula for π. *American Mathematical Monthly*, 104(9):852–855, November 1997. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). URL http://www.maa.org/pubs/monthly_nov97_toc.html. The authors employ Mathematica to extend earlier work of Bailey, Borwein, and Plouffe, [BBP97], done in 1995, but only just published, that discovered an amazing formula for π as is a power series in 16−k, enabling any base-16 digit of π to be computed without knowledge of any prior digits. In this paper, Mathematica is used to find several simpler formulas having powers of 4−k. They also note that it has been proven that their methods cannot be used to exhibit similar formulas in powers of 10−k.

REFERENCES


REFERENCES


REFERENCES


Borwein:1987:PAS


Barzilai:1988:TPS


Borowski:1988:DM


Borwein:1988:CCJ


Borwein:1988:MRT


Borwein:1988:CFF


Borwein:1988:RP


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


[Boxxb] J. M. Borwein and P. B. Borwein. On the mean iteration \((a, b) \leftarrow ((a + 3b)/4, (\sqrt{a}b + b)/2)\). Report, Department of Mathematics,
References


REFERENCES

Borwein:2001:RP

Borowski:2002:MCD

Borwein:2004:AGMa

Borwein:2004:MEP

Bailey:2005:FPC

Bailey:2005:EME


REFERENCES


REFERENCES


Bailey:2009:SMPb


Borwein:2009:HPH


Bailey:2010:ECO


Bailey:2010:SMP


Borwein:2010:ECM


Bacak:2011:DCL


Bailey:2011:HPN

REFERENCES


REFERENCES


[BB11j] D. Borwein and Jonathan M. Borwein. Proof of some experimentally conjectured formulas for π. Preprint, Department of Mathematics, University of Western Ontario and Centre for Computer-assisted Research Mathematics and its Applications (CARMA), School of Mathematical and Physical Sciences, University of Newcastle, London, ON, Canada and Callaghan, NSW 2308, Australia, December 4, 2011.


[BB12e] David Bailey and Jonathan Borwein. How to sell green energy in an era of abundant gas and oil. The Conversation, ??


[BB12l] David Bailey and Jonathan Borwein. Person or computer: could you pass the Turing Test? The Conversation, ??


REFERENCES


REFERENCES


REFERENCES


REFERENCES


[BB13q] David H. Bailey and Jonathan M. Borwein. Stupid science funding decisions? Australia’s not the only dunce. The Conversation,
Bailey:2013:WSB

Bailey:2013:WWW

Bailey:2013:YWF

Bailey:2014:OCE

Bailey:2014:RTP

Bailey:2014:PDUa


Bailey:2014:SDJ  

Bailey:2014:FF  

Bailey:2014:WCG  

Bailey:2014:WSP  

Bailey:2014:WMB  

Borwein:2014:DNS  

Bailey:2015:CTM  


com/david-h-bailey/does-gun-control-encourage-crime_b_7917684.html.


[Bailey:2015:EAM]


[Bailey:2015:ECO]


[Bailey:2015:HPA]


[Bailey:2015:HMP]


[Bailey:2015:HWD]

REFERENCES


REFERENCES


[BB16f] David H. Bailey and Jonathan M. Borwein. Are humans or computers better at mathematics? Blog posting, November 27, 2016. This article was co-authored with Jonathan M. Borwein before his death on 2 August 2016. A condensed version of this article appeared in [BB16n].


REFERENCES

huffingtonpost.com/david-h-bailey/pi-day-2016_b_9432600.html.

Bailey:2016:PNG


Bailey:2016:SEF


Bailey:2016:SPP


Bailey:2016:WMM


Bailey:2016:WCR


Borwein:2016:AGM

REFERENCES


REFERENCES


Bailey:1997:RME


Berggren:1997:PSB


Borwein:1997:RME


Borwein:1997:EFE


Berggren:2000:PSB

REFERENCES


REFERENCES


Bailey:2015:ELG


Borwein:2016:RME


Bailey:2007:HFI


Borwein:1996:GCP


Bailey:2008:EIE

REFERENCES

41/20/205203;http://stacks.iop.org/1751-8121/41/i=20/a=205203.


REFERENCES


REFERENCES


Borwein:2000:CSR


Bauschke:2001:ESE


Bauschke:2003:BMO


Bailey:2006:IIC


Bailey:2007:BI

REFERENCES

[87]


REFERENCES

Bailey:2010:ATB


Bailey:2011:EAN


Bausschke:2011:FPA


Bailey:2012:NP


Bailey:2012:EAN


Bailey:2012:ND

[BBC+12c] David H. Bailey, Jonathan M. Borwein, Cristian S. Calude, Michael J. Dinneen, Monica Dumitrescu, and Alex Yee. Normality


REFERENCES


Borwein:1997:PEN


Borwein:2000:PEN


Borwein:2004:PEN


Borwein:2016:PEN


Bacak:2010:ICL


REFERENCES


[BBG04b] Jonathan M. Borwein, David Borwein, and William F. Galway. Finding and excluding \( b \)-ary Machin-type individual digit formulae. Canadian Journal of Mathematics = Journal canadien de mathématiques, 56(5):897–925, 2004. CODEN CJMAAB. ISSN 0008-414X (print), 1496-4279 (electronic). URL http://docserver.carma.newcastle.edu.au/47/. This paper established the result that there are no degree-1 BBP-type formulas for \( \pi \), except when the base is 2 (or an integer power thereof).


REFERENCES


REFERENCES


Bailey:2016:SPDa


Bailey:2016:HHI


Bailey:2016:SPDb


Bailey:2013:CPF


Bailey:2014:PMF


Bailey:2017:PBO


David H. Bailey, Jonathan M. Borwein, Andrew Mattingly, and Glenn Wightwick. The computation of previously inaccessible digits of $\pi^2$ and Catalan’s constant. Report, Lawrence Berkeley National Laboratory; Centre for Computer Assisted Research Mathematics and its Applications (CARMA), University of Newcastle; IBM Australia, Berkeley, CA, USA; Callaghan, NSW 2308, Australia; St. Leonards, NSW 2065, Australia; Pyrmont, NSW 2009, Australia, April 11, 2011. 18 pp. URL http://crd.lbl.gov/~dhbailey/dhbpapers/bbp-bluegene.pdf.


David H. Bailey, Jonathan M. Borwein, Andrew Mattingly, and Glenn Wightwick. Computation and analysis of arbitrary dig-

[Bailey:1997:RCV]


[Benoist:2003:CQV]


[Borwein:1989:ACL]


[Borwein:1997:PSS]

REFERENCES


[BBS+15a]  David H. Bailey, Jonathan M. Borwein, Amir Salehipour, Marcos López de Prado, and Qiji Zhu. Online tools for demonstra-
REFERENCES


REFERENCES

Bailey:2017:ERMb


Bailey:2018:ERM


Borwein:2011:LSEb


Borwein:2012:LSEb


Borwein:1987:ESE


Borwein:1988:ESE

REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES

111


Breen:2016:DBJ


Bean:2013:MDM


Bejancu:1994:EBP


Borwein:1976:VS


Borwein:1977:SRV


Berndt:1988:BRJ

REFERENCES


[BF93c] Jonathan M. Borwein and Simon Fitzpatrick. A weak Hadamard smooth renorming of $L_1(\Omega, \mu)$. Canadian mathematical bulletin
REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES

CB09781139626804. With a foreword by Helaman Ferguson and Claire Ferguson.


Borwein:2012:OMT


Beliakov:2013:EIBa


Borwein:2008:CCC


Borwein:2002:ANB


Borwein:1980:HMC


References


[Borwein:1991:CBE]

[Borwein:1991:DRE]

[Borwein:1991:MP]

[Borwein:1991:PCF]

[Borwein:1992:ASW]
Borwein:1992:DMF


Borwein:1992:PFb


Borwein:1992:PFc


Borwein:1992:MHP


Borwein:1993:CDS


Borwein:1993:PFP

REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES

[134x692]REFERENCES

Borwein:1972:MON

Borwein:1974:ORP

Borwein:1976:FPD

Borwein:1976:NFJ

Borwein:1977:MCO

Borwein:1977:PEH

Borwein:1977:PEP
J. Borwein. Proper efficient points for maximizations with respect to cones. *SIAM Journal on Control and Optimization*, 15
REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES

Borwein:1986:RME

Borwein:1986:SVP

Borwein:1987:A

Borwein:1987:CMN

Borwein:1987:CCM

Borwein:1987:AGM

Borwein:1987:OC


[Bor87k] Jonathan M. Borwein. Spectral analysis via convex programming. Charnes' 70th birthday conference, IC2, University of Texas at Austin, Austin, TX, USA., October 15, 1987.


REFERENCES


REFERENCES


Jonathan M. Borwein. Pi, Euler, Ramanujan, and MAPLE. Colloquium, Department of Computer Science, University of Manitoba, Winnipeg, MB, Canada., November 9, 1989.

Jonathan M. Borwein. Quadratic mean iterations. Carleton University/Université d’Ottawa joint Colloquium, Carleton University, Ottawa, ON, Canada., March 4, 1989.


[Bor90g] Jonathan M. Borwein. Differentiability properties of convex, Lipschitz and semicontinuous functions. Ontario Math Meetings #88, Brock University, St. Catharines, ON, Canada., April 21, 1990.


REFERENCES


[Bor90s] Jonathan M. Borwein. The history of the computation of pi. APICS Lecture, Memorial University, St John’s, NL, Canada., March 31, 1990.

[Bor90t] Jonathan M. Borwein. The history of the computation of pi. APICS Lecture, Université de Moncton, Moncton, NB, Canada., April 5, 1990.
REFERENCES


[Bor90w] Jonathan M. Borwein. The history of the computation of pi. APICS Lecture, Memorial University, St John’s, NL, Canada., March 31, 1990.

[Bor90x] Jonathan M. Borwein. The history of the computation of pi. APICS Lecture, Université de Moncton, Moncton, NB, Canada., April 5, 1990.


REFERENCES


REFERENCES


[Bor91d] Jonathan M. Borwein. Differentiability properties of convex, of Lipschitz, and of semicontinuous mappings on Banach spaces. In
REFERENCES


[Bor91g] Jonathan M. Borwein. Discovering analytic objects by computer. Colloquium, Department of Mathematics, Guelph University, Guelph, ON, Canada., November 12, 1991.


[Bor91i] Jonathan M. Borwein. Euler, Mahler, Ramanujan and a little pi: Discovering analytic objects by computer. One of two invited talks at the Festkolloquium for Dr. A. Peyerimhoff ’s 65th birthday, Ulm, Germany., April 25, 1991.


REFERENCES

Borwein:1991:EMRd

Borwein:1991:EMRe

Borwein:1991:GFB

Borwein:1991:RWLa

Borwein:1991:RWLb

Borwein:1991:SDPa

Borwein:1991:SDPb

Borwein:1991:SDPc
REFERENCES


[Bor92g] Jonathan M. Borwein. Euler, Mahler, Ramanujan: Discovering analytic objects by computer. Seminar, Department of Mathe-
Borwein:1992:FSOa

Borwein:1992:FSOb

Borwein:1992:GCE
Jonathan M. Borwein. Guided computer experimentation in mathematics: Euler, Mahler, Ramanujan and Maple. Harry H. Gehman Lecture, MAA/OMM Meeting, Queen’s University, Kingston, ON, Canada., May 2, 1992.

Borwein:1992:IDE

Borwein:1992:IMSa

Borwein:1992:IMSb

Borwein:1992:IMSc

J. M. Borwein. Asplund spaces are sequentially reflexive. Accepted for publication in the Canadian Journal of Mathematics, but withdrawn and merged with another paper. Jon Borwein recorded that as publication number 121, but because the article numbers changed with each update of his CV, that number has long been incorrect., 1993.


Jonathan M. Borwein. First and second order differentiability of convex functions on various Banach spaces. Regional Functional
REFERENCES


REFERENCES


[Bor94e] Jonathan M. Borwein. Experimental mathematics, promises and pitfalls. Colloquium, Department of Mathematics, Indiana University, Bloomington, IN, USA., November 18, 1994.

REFERENCES


[Bor94i] Jonathan M. Borwein. Maximization entropy methods (using derivative information) and infinite dimensional convex programming. XV International Mathematical Programming Symposium, Ann Arbor, MI, USA., August 18, 1994.


Borwein:1994:VHD

Borwein:1994:WTA

Borwein:1994:WEMa

Borwein:1994:WEMc

Borwein:1994:WEMb

Borwein:1995:CHNa

Borwein:1995:CHNb

Borwein:1995:CAD
REFERENCES


REFERENCES


[Bor95m] Jonathan M. Borwein. Experimental mathematics, promises and pitfalls. Colloquium, Department of Mathematics and Statistics, University of Saskatchewan, Saskatoon, SK, Canada., November 9, 1995.


[Bor95o] Jonathan M. Borwein. Maximum entropy methods (using derivative information) and infinite dimensional convex programming. Pure Mathematics Seminar, University of Western Australia, Crawley, WA 6009, Australia., August 1, 1995.


REFERENCES


[Bor96c] Jonathan M. Borwein. Experimental mathematics, promises and pitfalls. Colloquium & MAA Visiting Lecture, Department of
REFERENCES

Mathematics, Western Washington University, Bellingham, WA 98225, USA., February 6, 1996.


REFERENCES


REFERENCES


[Bor97s] Jonathan M. Borwein. Talking about \( pi \). Colloquium, School of Mathematical Sciences, Lakehead University, Thunder Bay, ON P7B 5E1, Canada., September 22, 1997.


[Bor97v] Jonathan M. Borwein. Three adventures: Symbolically discovered identities for \( \zeta(4n + 3) \) and like matters. Joint CS/C&O Colloquium, University of Waterloo, Waterloo, ON, Canada., October 9, 1997.

REFERENCES


REFERENCES


REFERENCES


REFERENCES

[Bor99e] Jonathan M. Borwein. The doing of mathematics in the presence of technology. Canadian Mathematics Education Study Group (CMESG), First Plenary, Brock University, St. Catharines, ON, Canada, June 4–8., June 4, 1999.


[Bor99m] Jonathan M. Borwein. Generic behaviour of generalized gradients. Special Session on Nonlinear Analysis, Canadian Mathematical Society Summer Meeting, Memorial University, St John’s, NL, Canada., May 29, 1999.


REFERENCES


REFERENCES


[Bor00e] Jonathan M. Borwein. Experimental mathematics and exact computation. Colloquium, University of Western Australia, Crawley, WA 6009, Australia., April 19, 2000.


[Bor00g] Jonathan M. Borwein. Experimental mathematics and exact computation. Ernst Schrödinger Lecture, Schrödinger Institute, University of Vienna, Vienna, Austria., October 5, 2000.
REFERENCES


REFERENCES


REFERENCES


REFERENCES


[Bor01p] Jonathan M. Borwein. Multivariable sinc integrals and volumes of convex polyhedra. Special Session on Series and Integrals, Com-
REFERENCES


Jonathan M. Borwein. The CEIC: The next four years. West Coast Optimization Fall Meeting, University of Washington, Seattle, WA, USA., November 2, 2002.


Jonathan M. Borwein. The digital library of mathematics. Presentation at ICM Satellite Meeting on Electronic Information and
REFERENCES


[Bor02m] Jonathan M. Borwein. The experimental mathematician: The pleasure of discovery and the role of proof. Response and Discussion, 25th Anniversary Meeting of the Canadian Math Educators Study Group (CMESG), Queen’s University, Kingston,


[Bor02o] Jonathan M. Borwein. Introduction to the work of the CEIC. Electronic Information Afternoon at the ICM, Beijing, August 20–27, 2002., August 26, 2002.


REFERENCES


[Bor03q] Jonathan M. Borwein. Handling electronic issues in the international mathematical community. ICIAM 2003 Minisymposium,


REFERENCES

Borwein:2003:MEPa


Borwein:2003:MEPb


Borwein:2003:MEPc


Borwein:2003:MEPd


Borwein:2003:NNM


Borwein:2003:OWL


Borwein:2003:OFV


Borwein:2003:TOQ

[Bor03-34] Jonathan M. Borwein. Three open questions. Special Session in Honour of Petar Kenderov’s 60th Birthday, First Congress of
the Mathematical Society of South East Europe (MASSE\textsuperscript{E}), Bulgaria., September 17, 2003.


REFERENCES


REFERENCES


[Bor05b] Jonathan M. Borwein. (2 times) ten challenge problems. Third Clifford Lecture, Tulane University, New Orleans, LA, USA., April 1, 2005.


[Bor05d] Jonathan M. Borwein. Aarms. Presentation, Department of Math and Stats, Memorial University, St John’s, NL, Canada., November 17, 2005.


[Bor05g] Jonathan M. Borwein. Computational lists and challenges in mathematics? Applied and Computational Mathematics Sem-
inar, Dalhousie University, Halifax, NS, Canada., October 28, 2005.


REFERENCES


[Bor05r] Jonathan M. Borwein. The future is here? Presentation to National Educational Forum, Fields Institute, Toronto, ON M5T 3J1, Canada, May 6–8., May 6, 2005.


[Bor05t] Jonathan M. Borwein. High performance mathematics. Presentation to HPC@Dal, Dalhousie University, Halifax, NS, Canada., June 10, 2005.


Jonathan M. Borwein. The life of pi. Colloquium: La Trobe University, Melbourne, VIC, Australia., October 4, 2005.

Jonathan M. Borwein. Lists and challenges in mathematics? Colloquium, Mathematics Department, Rutgers, the State University of New Jersey., November 10, 2005.


Jonathan M. Borwein. Mathematics by experiment, II. Second Clifford Lecture, Tulane University, New Orleans, LA, USA., April 1, 2005.


REFERENCES


REFERENCES


REFERENCES


[Bor06g] Jonathan M. Borwein. Collaborative environments. Panel Discussion HPCS 06, Memorial University, St John’s, NL, Canada., May 17, 2006.


REFERENCES


[Bor06s] Jonathan M. Borwein. Four lectures on variational principles. II: Monotone operators as convex objects. Spring School on Analysis, Paseky, Czech Republic, April 25, 2006.


REFERENCES


REFERENCES


REFERENCES


[Bor07-27] Jonathan M. Borwein. Some convexity results a Jon or a Thompson might like. 65th Birthday Colloquium lecture for Jon Thompson, (Inter-Campus Seminar Day), University of New Brunswick, Moncton, NB, Canada., June 8, 2007.


REFERENCES

Jonathan M. Borwein. Effective computation of Bessel functions. SIAM-AMS Special Session on Special Functions, Combined Membership Meetings, San Diego, CA, USA, Jan 6–9, 2008., January 6, 2008.


REFERENCES


[Bor08r] Jonathan M. Borwein. The past 60 years in mathematics. Colloquium, Department of Mathematics, University of Auckland, Auckland, New Zealand., December 4, 2008.


REFERENCES


REFERENCES


REFERENCES


[Bor09s] Jonathan M. Borwein. Introduction to carma. Presentation to students from Dungog High School in CARMA., August 11, 2009.


REFERENCES


REFERENCES


REFERENCES


[Bor11g] Jonathan M. Borwein. Actually: Teaching and researching at the tertiary level with collaboration tools. CARMA Colloquium., November 3, 2011.


REFERENCES


[Bor11t] Jonathan M. Borwein. Fractal geometry. Presentation to Year 7 students form Wallsend with Michael Rose to the NSW MEGS program (Making Educational Goals Sustainable)., February 16, 2011.


REFERENCES


REFERENCES


Borwein:2012:FE  

Borwein:2012:FM  

Borwein:2012:IIC  
Jonathan M. Borwein. Interdisciplinarity, innovation, collaboration and creativity or how to manage a research portfolio. CARMA Colloquium., September 13, 2012.

Borwein:2012:LPA  

Borwein:2012:MEF  

Borwein:2012:MEP  

Borwein:2012:MTW  


REFERENCES


Borwein:2013:EMI


Borwein:2013:EEMa


Borwein:2013:EEMb


Borwein:2013:LP


Borwein:2013:MEP


Borwein:2013:MSS


Borwein:2013:NDR


Borwein:2013:PD


Borwein:2013:PPE


REFERENCES


<table>
<thead>
<tr>
<th>Reference Key</th>
<th>Author</th>
<th>Title</th>
<th>Event, Organization</th>
</tr>
</thead>
</table>


REFERENCES


[Bor14x] Jonathan M. Borwein. Seeing things in mathematics by walking on real numbers. Inaugural Möbius Lecture Series, Colloquium, Department of Mathematics, Baylor University, Waco, Texas., April 24, 2014.


Borwein:2015:MWK


Borwein:2015:TW


Borwein:2015:AOF


Borwein:2015:BMY


Borwein:2015:CAGb


Borwein:2015:DRM


Borwein:2015:ECV


Borwein:2015:FFC

REFERENCES


Keynote lectures, RMIT Workshop on Optimisation, August 11, 2013., August 11, 2015.


REFERENCES


REFERENCES


REFERENCES


[BRxx] J. M. Borwein and B. Richmond. When is a matrix a square? Research report 5, Department of Mathematics, Dalhousie University and Department of Combinatorics and Optimization, University of Waterloo, Halifax, NS, Canada and Waterloo, ON, Canada, 19xx. 22 pp.


REFERENCES

245


J. M. Borwein and T. Stanway. The impact of technology on the doing of mathematics. In John Grant McGloughlin, editor,
REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


[BT14a] J. M. Borwein and M. K. Tam. Reflection methods for inverse problems with application to protein conformation deter-
REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES


REFERENCES  


REFERENCES


REFERENCES


[Cohn:1992:PSS]


[Casazza:2015:M]

Cohen:2015:BRM


Crandall:2004:BIJ


Crandall:2012:GTB


Cvijovic:2010:PBB


Campbell:2016:LEJ


Dai:2015:PBB


Demir:1988:PSSa

REFERENCES

Deutsch:1988:PSSa  

Davis:2015:MSS  

Deville:199x:ADT  

Dai:2005:PBB  

Dai:2006:CBB  

DK16  

DL02  
Dai:2005:ABB

Deutsch:1986:PSE

Eberhard:2008:SOC

Engquist:2001:MUB

Erdos:1986:PSS

Fabian:1989:STL


[Gan14] Reinhard E. Ganz. The decimal expansion of $\pi$ is not statistically random. *Experimental Mathematics*, 23(2):99–104, 2014. CODEN ???? ISSN 1058-6458 (print), 1944-950X (electronic). See the reproduction of results, and reanalysis, in [BBBR16], that reveals a flaw in the statistical analysis in this paper: Ganz used only a single blocksize in sampling digits, and that blocksize produces anomalous statistics.
Ganz:2017:RR


Gessel:1988:PSSb


Gao:2015:BBL


Georgiev:2005:PBP


Gourevitc:2007:CBS


Galicki:2016:CAB

REFERENCES


REFERENCES


REFERENCES


Lixing Han, Michael Neumann, and Upendra Prasad. Alternating projected Barzilai–Borwein methods for nonnegative matrix


REFERENCES


REFERENCES

Li:2015:SNB


Liu:2000:BCT


Liu:2001:SES


Lewis:2001:BCT


Lin:2009:PPM


Liu:2013:MSB


Lupas:2002:SBF


Li:2014:PBB


Marcos:1991:CPB


Merca:2015:DI


Miller:1989:GRB


Miller:1989:FER


Monsky:1989:PSS


Momen:2018:NCG


Marechal:1999:CSA


Miller:2012:MBD


Marchant:2016:PJM


Nosratipour:2017:ANG


Nosratipour:2017:OCV


Nimbran:2015:TSA


Nicolaescu:1988:PSSb

REFERENCES


[Pospisil:2018:PBB] Lukáš Pospíšil and Zdeněk Dostál. The projected Barzilai–Borwein method with fall-back for strictly convex QCQP prob-


REFERENCES


REFERENCES

Reisner:2002:NTB


Robin:2006:BRP


Rajkovic:2009:GBC


Raydan:2002:RSD


Richter:1993:PSP


Rudin:1989:PSE


Reich:2015:IPO

REFERENCES

Schoenberg:1987:APS

Stodden:2013:SDR

Singh:1984:ATS

Schoenberg:1985:PSA

Scherzer:2015:HMM

Sopyla:2015:SGD


Patrick Sole. $D_4$, $E_6$, $E_8$ and the AGM. In Cohen et al. [CGM95], pages 448–455. ISBN 3-540-60114-7 (softcover). LCCN QA268
REFERENCES


REFERENCES


Xiao:2008:SBB


Xiao:2012:MCG


Xiao:2014:NBB


Xia:2012:ESI


Yang:1994:EBP


Yongxin:2000:GEV

Yuan:2012:BBG


Zaharescu:2006:BCA


Zalinescu:1986:LEJ


Zeilberger:2005:SSM


Zhang:2006:PPA


Zhao:2010:CBB

REFERENCES

Zhang:2013:NFB


Zhou:2012:EBP


Zhuang:1991:BCC


Zhang:2012:BTF


Zhang:2010:NFB


Zhou:2016:NSM


Zhang:2014:NFB