

# A Bibliography of Publications about the *Magma* Computational Algebra System

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

E-mail: [beebe@math.utah.edu](mailto:beebe@math.utah.edu), [beebe@acm.org](mailto:beebe@acm.org),  
[beebe@computer.org](mailto:beebe@computer.org) (Internet)  
WWW URL: <https://www.math.utah.edu/~beebe/>

07 August 2025  
Version 1.11

## Title word cross-reference

(11, 9, 8) [Ste15]. ( $n, n, 2$ ) [Bru06]. 1000 [RDU06]. 2 [Gol91, vW06]. 3 [NO91].  
 $a$  [GJS22].  $J_1$  [DL02, Gol91].  $\leq 50$  [BL96].  $M_{12}$  [DL02].  $p$  [Sla91].

**-groups** [NO91, Sla91]. **-invariant** [GJS22]. **-MinRank** [Ste15]. **-modular** [Gol91].

**14** [MP10].

**21st** [Jef08].

**4th** [HY14].

**7th** [SvADS07].

**8th** [GMV05].

'91 [Wat91]. '94 [ACM94].

**abelian** [Ste06]. **Abstract** [BC06, CP97, JM08]. **access** [O'B91]. **age** [Cri06]. **aided** [Geb06]. **Algebra** [Bos01, CP97, DGW<sup>+</sup>03, BCP97, CP96, CLO07, GMV05, GKW03, HSW89, LW99, OLC<sup>+</sup>07, Thi15, Wes99]. **Algebraic** [ACM94, CBP08a, CBP08b, Giu00, Lee14, Wat91, BCM94, CLO07, Kid10, KJJ<sup>+</sup>09, OLC<sup>+</sup>07]. **algebras** [LW03a, LW03b]. **Algorithm** [Kop25, MW91, Geb06, Ste15]. **Algorithmic** [KJJ<sup>+</sup>09, GPV08]. **Algorithms** [Lee14, CLO07, OLC<sup>+</sup>07, Sch91]. **Alternative** [ES10, Ste08, Ste13]. **Analysis** [CW11]. **analytic** [vW06]. **annual** [Jef08]. **Appendix** [Bai06]. **application** [DL02]. **Applications** [Fie06, Key01, GKW03]. **Arthur** [Cri06]. **Attacking** [CO15]. **August** [HY14]. **Austria** [Jef08]. **Automated** [LW03a, LW03b].

**based** [CW11]. **bases** [KJJ<sup>+</sup>09]. **Beijing** [SvADS07]. **bibliography** [Can91]. **binary** [CW11, CO15, GPV08]. **Birch** [Ste06]. **Bitfield** [Ric92]. **block** [Gol91, Ste15]. **Blockhandler** [Ric92]. **Bonn** [Wat91]. **bracket** [LW03a, LW03b]. **braid** [Geb06].

**Calculating** [Kem97]. **Can** [Ste08]. **Cardinality** [LM94]. **CASC** [GMV05]. **case** [Sla91]. **CAYLEY** [Ano91, Sch91, CR84, Can91, Cri06, Deh94, LW03a, LW03b, San91, Whi91]. **Champ** [Thi15]. **Character** [DI91, Sla91]. **Cherednik** [Thi15]. **China** [SvADS07]. **citations** [Can91]. **class** [Fie06]. **classes** [JR91]. **classical** [HJPS22]. **classifications** [PN13]. **Classifying** [Deh94]. **Codes** [Key01, Lee14, FG01, GPV08, Gra06]. **coding** [JM08]. **Cohomology** [Hol06]. **Colouring** [Lie06]. **combinatorics** [KJJ<sup>+</sup>09]. **commutative** [CLO07, OLC<sup>+</sup>07]. **commutativity** [DI91]. **commutator** [Gla91]. **Comparison** [LW99]. **Compiled** [LMRS08]. **Compiled-Interpreted** [LMRS08]. **Computation** [ACM94, Bos95, Els16, Jef08, LMS07, LMRS08, Wat91]. **Computational** [Bos01, Bos06, CLO07, OLC<sup>+</sup>07, SvADS07]. **Computer** [CP97, DGW<sup>+</sup>03, Geb06, GKW03, Wes99, CR84, CP96, LW99, GMV05]. **Computing** [Kid10, LM94, RDU06, Sch90, vW06, GMV05, Sut17]. **Concrete** [BC06]. **Conference** [Ano91, HY14, SvADS07, Bos01]. **Congress** [Ano84, FvdHJT10]. **Conic** [LW03b]. **conjecture** [Ste06]. **conjugacy** [Geb06, JR91]. **Constructing** [DL02, Roy91, Tay06]. **Coset** [Hav91, DL02]. **Courses** [CP97]. **CQF** [Kop20]. **Create** [ES10, Ste08]. **creating** [Ste13]. **cryptographic** [DKS09]. **Curriculum** [Ano84]. **curve** [CO15, vW06]. **curves** [Giu00]. **cyclotomic** [Bos95].

**Decoding** [FG01, Lee14]. **defined** [Gla91]. **Degree** [BL96, RDU06]. **degrees** [Sla91]. **demonstration** [Sut17]. **descriptions** [O'B91]. **design** [BCM94, CW11]. **Designs** [Key01]. **detected** [Car06b]. **Development**

[GPV08]. **dimensions** [KOT22]. **Diophantine** [Bru06]. **Direct** [Ste15]. **Discovering** [BC06]. **discovery** [Geb06]. **distance** [Gra06]. **division** [MP10]. **Dotted** [MW91]. **Dyer** [Ste06].

**Editor** [Bos01]. **Education** [Ano84]. **Effects** [Ano84]. **eigenvalues** [KOT22]. **eight** [KOT22]. **electronic** [O'B91]. **elliptic** [CO15]. **embeddings** [HJPS22]. **Endomorphism** [Sch90]. **England** [ACM94]. **enumeration** [Hav91]. **Environment** [LMRS08]. **equations** [Bru06]. **Essen** [Ano91]. **experiments** [Bos06]. **Extensions** [Gla91, Hol06].

**Factorization** [Sme14, SW91, Whi91]. **fast** [Geb06]. **field** [Fie06]. **fields** [Fie06, Giu00]. **Finite** [BL96, Giu00]. **Flat** [KOT22]. **Foreword** [Bos01]. **foundations** [GKW03]. **Free** [ES10, Ste08, Ste13]. **Functions** [BC96, CBFS14].

**Galois** [Els16, Sut17]. **General** [Lee14, PN13]. **Generalized** [Key01]. **generation** [LW03a, LW03b]. **Generators** [LM94, Gra91]. **Generic** [LMS07]. **genus** [vW06]. **geometric** [HSW89, LW03a, LW03b]. **Geometries** [Deh94, DL02]. **Geometry** [Lee14, CLO07, LW03a, LW03b, OLC<sup>+</sup>07]. **Germany** [Wat91]. **GF** [Gra91]. **global** [Fie06]. **GLS** [CO15]. **Good** [Lun14]. **Goppa** [FG01]. **GPU** [Ste15]. **Graded** [Bro06]. **gradings** [Lun14]. **graphs** [Lie06, Roy91]. **Greece** [GMV05]. **Gröbner** [KJJ<sup>+</sup>09]. **Group** [LM94, CR84, Hol06, O'B91, San91]. **Groups** [BL96, DL02, Els16, Geb06, Gla91, Gra91, JR91, Kem97, NO91, RDU06, Sla91, Sut17]. **Guest** [Bos01]. **guide** [Wes99].

**Hagenberg** [Jef08]. **Handbook** [BC96, CBFS14, GKW03]. **Hermitian** [Key01]. **High** [LMRS08]. **High-Performance** [LMRS08]. **Hybrid** [LMRS08].

**ICCS** [SvADS07]. **ICMS** [FvdHJT10, HY14]. **Ideals** [CLO07, OLC<sup>+</sup>07]. **II** [LW03b, SvADS07]. **Implementation** [Lee14]. **Implementing** [DKS09]. **Incidence** [LW03a]. **International** [ACM94, Ano84, FvdHJT10, HY14, Jef08, SvADS07, Wat91, GMV05]. **Interpreted** [LMRS08]. **introduction** [CBP08a, CBP08b, CLO07, OLC<sup>+</sup>07, Wak95]. **Invariant** [SW91, GJS22, HJPS22]. **invariants** [Kem97]. **ISSAC** [Jef08, ACM94, Wat91]. **Issue** [Bos01].

**Jacobian** [vW06]. **Japan** [FvdHJT10]. **July** [ACM94, Jef08, Wat91].

**K3** [Bro06]. **Kōbe** [FvdHJT10]. **Kalamata** [GMV05]. **Kingdom** [ACM94]. **Korea** [HY14].

**language** [Bai06, BCM94, BCP97, CBP08b, CBP08a]. **Laplacian** [KOT22].  
**large** [Gra06, KOT22]. **laureate** [Cri06]. **length** [NO91]. **less** [RDU06].  
**library** [JR91]. **linear** [GPV08, Gra06]. **List** [BL96].

### Magma

[Bos01, CBP08a, CP96, DL02, FG01, GPV08, Giu00, Bai06, BCM94, Bos95, BCPS95, BC96, BCP97, BC06, CW11, CP97, CBP08a, CBP08b, CDFW10, CBFS14, CO15, DKS09, ES10, Hol06, Kem97, Key01, Kid10, Kop20, Kop25, Lee14, Lun14, Ste15, Ste06, Ste08, Ste13, Sut17, Thi15, Wak95, Els16].

**Maple** [ES10, MP10, Ste08, Ste13]. **Mathematica** [ES10, Ste08, Ste13].

**Mathematical** [Ano84, ES10, FvdHJT10, HY14, FvdHJT10].

**mathematician** [Cri06]. **Mathematics** [BC06]. **MATLAB**

[ES10, Ste13, Ste08]. **Maximal** [Sme14, JR91]. **May** [SvADS07]. **meeting** [Jef08]. **methods** [GPV08]. **Minimal** [LM94]. **minimum** [Gra06].

**MinRank** [Ste15]. **Modular** [Sch90, Gol91, Kem97, Ste06]. **modules**

[Car06a]. **Muller** [Key01]. **Multilinear** [Whi91]. **multiplication** [MP10].

**natural** [HJPS22]. **non** [GPV08]. **non-linear** [GPV08]. **normal** [DI91].

**November** [Ano91]. **Number** [Bos01, CDFW10, Bos06].

**octonions** [Tay06]. **only** [JM08]. **open** [Ste08, Ste13]. **Orders** [Sme14].

**oriented** [LW99]. **orthogonal** [Gra91]. **Oval** [Key01]. **Oxford** [ACM94].

**Package** [Kop25, CW11, HSW89, Kop20, Ric92, San91, Thi15]. **pairings** [DKS09]. **Papers** [Ano84]. **Part** [SvADS07]. **Performance** [LMRS08].

**Permutation** [BL96, RDU06]. **permutations** [JR91]. **planar** [Lie06].

**polynomial** [LW99, MP10]. **polynomial-oriented** [LW99]. **Polynomials** [Kop25, SW91, Bos95, Sut17]. **power** [Gla91]. **power-commutator** [Gla91].

**practical** [Wes99]. **presentations** [Gla91, JR91]. **Primitive** [BL96, RDU06].

**principal** [Gol91]. **problem** [Ste15]. **Problems** [BCPS95]. **Proceedings** [ACM94, Ano91, Bos01, SvADS07, Wat91, HY14, Jef08, FvdHJT10, GMV05].

**Programming** [BCM94, LMS07, LMRS08, CBP08a, CBP08b]. **Project**

[ES10]. **projective** [LW03a, LW03b]. **Projectively** [SW91]. **projectivity** [Car06b]. **proof** [LW03a, LW03b]. **Proposal** [HSW89]. **Providing** [O'B91].

**pseudorandom** [CW11]. **pure** [HJPS22].

**qPoly** [Kop25]. **Quaternionic** [Kop25].

**Reducing** [BC06]. **Reed** [Key01]. **reflection** [Kem97]. **relations** [Gra91].

**Representation** [Sch91, Gol91]. **Representations** [Sch90]. **ring**

[GJS22, San91]. **Rings** [Sch90, Bro06, HJPS22, Lun14].

**SAGE** [JM08, ES10, Ste13]. **Science** [SvADS07]. **scientific** [GMV05].

**Searching** [Gra06]. **Second** [Bos01]. **Seoul** [HY14]. **September**

[FvdHJT10, GMV05]. **sequences** [CW11]. **Set** [LM94]. **short** [LW03a, LW03b]. **signature** [Bru06]. **simple** [JR91]. **Software** [ES10, HY14, FvdHJT10, HSW89]. **solution** [Ste15]. **Solvable** [LM94]. **Solving** [BCPS95]. **Some** [Bos06, Bru06, Key01, Gra91, NO91]. **source** [Ste08, Ste13]. **South** [HY14]. **Sparse** [MP10]. **Special** [Bos01, Gra91, Bro06]. **split** [Tay06]. **sporadic** [DL02]. **Straightening** [MW91]. **strategies** [Hav91]. **structures** [BCM94, Kid10]. **study** [Sla91]. **Studying** [Ste06]. **subalgebras** [Car06b]. **subgroups** [DI91, JR91]. **Support** [Car06a]. **surfaces** [Bro06]. **Swinnerton** [Ste06]. **Swinnerton-Dyer** [Ste06]. **Sylow** [JR91]. **Symbolic** [ACM94, Jef08, LMS07, LMRS08, Wat91, Ano84]. **symplectic** [Gra91]. **Symposium** [ACM94, Jef08, Wat91]. **Synthetic** [SW91]. **System** [CP97, BCP97, CP96]. **Systems** [Ano84, DGW<sup>+</sup>03, GKW03, LW99, Wes99].

**tables** [DI91]. **teaching** [CR84]. **ternary** [Bru06]. **Tesla** [Ste15]. **testing** [Geb06]. **Their** [Ano84]. **theorems** [LW03a, LW03b]. **Theory** [Bos01, CDFW10, Sme14, Bos06, CR84, Fie06, JM08, PN13, Sch91]. **third** [FvdHJT10, Ano91]. **Tool** [CDFW10]. **tools** [Sch91]. **tori** [KOT22]. **transitive** [Roy91]. **tutorial** [DKS09].

**Unifying** [ES10]. **Units** [Key01]. **United** [ACM94]. **Universität** [Ano91]. **user** [BCP97]. **Users** [Ano91]. **Using** [CP97, Ste06].

**varieties** [Car06a, CLO07, OLC<sup>+</sup>07, Ste06]. **vertex** [Roy91]. **vertex-transitive** [Roy91]. **vertices** [Roy91]. **Viable** [ES10, Ste08, Ste13]. **Victorian** [Cri06]. **Virtues** [LMS07].

**Wiedemann** [Ste15]. **Wielandt** [NO91]. **Working** [Kop25]. **workshop** [GMV05].

## References

ACM:1994:IPI

- [ACM94] ACM, editor. *ISSAC '94: Proceedings of the 1994 International Symposium on Symbolic and Algebraic Computation: July 20–22, 1994, Oxford, England, United Kingdom*. ACM Press, New York, NY 10036, USA, 1994. ISBN 0-89791-638-7. LCCN QA76.95.I59 1994.
- Anonymous:1984:PSM
- [Ano84] Anonymous. Papers from Symbolic Mathematical Systems and Their Effects on the Curriculum — International Congress on Mathematical Education. *SIGSAM Bulletin (ACM Special In-*

terest Group on Symbolic and Algebraic Manipulation), 18(4):1–62, November/February 1984. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic). Issue labeled vol. 18, no. 4, November 1984 (issue #72) and vol. 19, no. 1, February 1985 (issue #73).

Anonymous:1991:PTC

- [Ano91] Anonymous. Proceedings of the Third CAYLEY Users Conference, November 17–19, 1988, Universität Essen. *SIGSAM Bulletin (ACM Special Interest Group on Symbolic and Algebraic Manipulation)*, 25(1):25–81, January 1991. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

Bailey:2006:AML

- [Bai06] Geoff Bailey. Appendix: The Magma language. In Bosma and Cannon [BC06], pages 331–356. ISBN 3-540-37632-1 (hardcover), 3-540-37634-8 (e-book). ISSN 1431-1550. LCCN QA155.7.E4 D57 2006. URL [http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7\\_15.pdf](http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7_15.pdf).

Bosma:1996:HMF

- [BC96] W. Bosma and J. J. Cannon. *Handbook of Magma Functions*. School of Mathematics and Statistics, University of Sydney, Sydney, NSW, Australia, 1996.

Bosma:2006:DMM

- [BC06] Wieb Bosma and John Cannon, editors. *Discovering Mathematics with Magma: Reducing the Abstract to the Concrete*, volume 19 of *Algorithms and computation in mathematics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2006. ISBN 3-540-37632-1 (hardcover), 3-540-37634-8 (e-book). ISSN 1431-1550. xxiv + 374 pp. LCCN QA155.7.E4 D57 2006. URL <http://www.loc.gov/catdir/enhancements/fy0824/2006931477-b.html>; <http://www.loc.gov/catdir/enhancements/fy0824/2006931477-d.html>; <http://www.loc.gov/catdir/toc/fy0707/2006931477.html>; <http://www.springerlink.com/content/978-3-642-01960-9/>; <http://www.springerlink.com/openurl.asp?genre=book&isbn=978-3-540-37632-3>.

Bosma:1994:PAS

- [BCM94] Wieb Bosma, John Cannon, and Graham Matthews. Programming with algebraic structures: design of the Magma language. In ACM [ACM94], pages 52–57. ISBN 0-89791-638-7.

LCCN QA76.95.I59 1994. URL <http://www.acm.org:80/pubs/citations/proceedings/issac/190347/p52-bosma/>.

**Bosma:1997:MAS**

- [BCP97] Wieb Bosma, John J. Cannon, and Catherine Playoust. The Magma algebra system. I. The user language. *Journal of Symbolic Computation*, 24(3–4):235–265, September–October 1997. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic). Computational algebra and number theory (London, 1993).

**Bosma:1995:SPM**

- [BCPS95] W. Bosma, J. J. Cannon, C. Playoust, and A. Steel. *Solving Problems with Magma*. School of Mathematics and Statistics, University of Sydney, Sydney, NSW, Australia, 1995.

**Buekenhout:1996:LFP**

- [BL96] Francis Buekenhout and Dimitri Leemans. On the list of finite primitive permutation groups of degree  $\leq 50$ . *Journal of Symbolic Computation*, 22(2):215–226 (or 215–225??), August 1996. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

**Bosma:1995:CCP**

- [Bos95] Wieb Bosma. Computation of cyclotomic polynomials with Magma. In *Computational algebra and number theory (Sydney, 1992)*, volume 325 of *Math. Appl.*, pages 213–225. Kluwer Academic Publishers Group, Norwell, MA, USA, and Dordrecht, The Netherlands, 1995.

**Bosma:2001:SIC**

- [Bos01] Wieb Bosma. Special issue on computational algebra and number theory: Proceedings of the Second Magma Conference: Foreword of the Guest Editor. *Journal of Symbolic Computation*, 31(1–2):1, January/February 2001. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic). URL <http://www.idealibrary.com/links/doi/10.1006/jsco.2000.0435>; <http://www.idealibrary.com/links/doi/10.1006/jsco.2000.0435/pdf>.

**Bosma:2006:SCE**

- [Bos06] Wieb Bosma. Some computational experiments in number theory. In Bosma and Cannon [BC06], pages 1–30. ISBN 3-540-37632-1 (hardcover), 3-540-37634-8 (e-book). ISSN 1431-1550.

LCCN QA155.7.E4 D57 2006. URL [http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7\\_1.pdf](http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7_1.pdf); <http://link.springer.com/content/pdf/bfm:978-3-540-37634-7/1.pdf>.

**Brown:2006:GRS**

- [Bro06] Gavin Brown. Graded rings and special K3 surfaces. In Bosma and Cannon [BC06], pages 137–159. ISBN 3-540-37632-1 (hardcover), 3-540-37634-8 (e-book). ISSN 1431-1550. LCCN QA155.7.E4 D57 2006. URL [http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7\\_6.pdf](http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7_6.pdf).

**Bruin:2006:STD**

- [Bru06] Nils Bruin. Some ternary Diophantine equations of signature  $(n, n, 2)$ . In Bosma and Cannon [BC06], pages 63–91. ISBN 3-540-37632-1 (hardcover), 3-540-37634-8 (e-book). ISSN 1431-1550. LCCN QA155.7.E4 D57 2006. URL [http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7\\_3.pdf](http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7_3.pdf).

**Cannon:1991:BCC**

- [Can91] John Cannon. A bibliography of Cayley citations. *SIGSAM Bulletin (ACM Special Interest Group on Symbolic and Algebraic Manipulation)*, 25(1):75–81, January 1991. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

**Carlson:2006:SVM**

- [Car06a] Jon F. Carlson. Support varieties for modules. In Bosma and Cannon [BC06], pages 187–204. ISBN 3-540-37632-1 (hardcover), 3-540-37634-8 (e-book). ISSN 1431-1550. LCCN QA155.7.E4 D57 2006. URL [http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7\\_8.pdf](http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7_8.pdf).

**Carlson:2006:WPD**

- [Car06b] Jon F. Carlson. When is projectivity detected on subalgebras? In Bosma and Cannon [BC06], pages 205–220. ISBN 3-540-37632-1 (hardcover), 3-540-37634-8 (e-book). ISSN 1431-1550. LCCN QA155.7.E4 D57 2006. URL [http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7\\_9.pdf](http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7_9.pdf).

**Cannon:2014:HMF**

- [CBFS14] John Cannon, Wieb Bosma, Claus Fieker, and Allan Steel. *Handbook of Magma Functions*. University of Sydney, Sydney, NSW, Australia, January 30, 2014. cxxxv + 5383 + lxiv pp.

**Cannon:2008:APMa**

- [CBP08a] John Cannon, Wieb Bosma, and Catherine Playoust. *Algebraic programming with Magma: an introduction to the Magma language*, volume 1. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2008. ISBN 3-540-62746-4. LCCN ????

**Cannon:2008:APMb**

- [CBP08b] John Cannon, Wieb Bosma, and Catherine Playoust. *Algebraic programming with Magma: an introduction to the Magma language*, volume 2. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2008. ISBN 3-540-62747-2. LCCN ????

**Cannon:2010:MTN**

- [CDFW10] John Cannon, Steve Donnelly, Claus Fieker, and Mark Watkins. Magma — a tool for number theory. *Lecture Notes in Computer Science*, 6327:253–255, 2010. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic). URL [http://link.springer.com/content/pdf/10.1007/978-3-642-15582-6\\_43.pdf](http://link.springer.com/content/pdf/10.1007/978-3-642-15582-6_43.pdf).

**Cox:2007:IVA**

- [CLO07] David A. Cox, John B. Little, and Donal O’Shea. *Ideals, varieties, and algorithms: an introduction to computational algebraic geometry and commutative algebra*. Undergraduate texts in mathematics. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., third edition, 2007. ISBN 0-387-35650-9, 0-387-35651-7 (e-book). xv + 551 pp. LCCN QA564 .C688 2007. URL <http://www.loc.gov/catdir/enhancements/fy0814/2006930875-d.html>; <http://www.loc.gov/catdir/enhancements/fy0814/2006930875-t.html>; <http://www.springerlink.com/openurl.asp?genre=book&isbn=978-0-387-35650-1>.

**Chi:2015:ABG**

- [CO15] Jesús-Javier Chi and Thomaz Oliveira. Attacking a binary GLS elliptic curve with Magma. In *Progress in cryptology—LATINCRYPT 2015*, volume 9230 of *Lecture Notes in Comput. Sci.*, pages 308–326. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2015.

- Cannon:1996:MNC**
- [CP96] John Cannon and Catherine Playoust. MAGMA: a new computer algebra system. *Euromath Bulletin*, 2(1):113–144, 1996. ISSN 1359-4346.
- Cannon:1997:UMC**
- [CP97] J. Cannon and C. Playoust. Using the Magma computer algebra system in abstract algebra courses. *Journal of Symbolic Computation*, 23(5–6):459–484, May–June 1997. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).
- Cannon:1984:CTG**
- [CR84] John J. Cannon and Jim Richardson. Cayley: teaching group theory by computer. *SIGSAM Bulletin (ACM Special Interest Group on Symbolic and Algebraic Manipulation)*, 18–19(4–1):15–18, November/February 1984. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).
- Crilly:2006:ACM**
- [Cri06] A. J. Crilly. *Arthur Cayley: mathematician laureate of the Victorian age*. The Johns Hopkins University Press, Baltimore, MD, USA, 2006. ISBN 0-8018-8011-4. xxi + 609 pp. LCCN QA29 .C39 C75 2006. URL <http://www.loc.gov/catdir/bios/jhu052/2004005682.html>; <http://www.loc.gov/catdir/description/jhu051/2004005682.html>; <http://www.loc.gov/catdir/toc/fy0612/2004005682.html>.
- Cai:2011:ADB**
- [CW11] Ying Cai and Tiefeng Wang. Analysis and design of binary pseudorandom sequences based on the Magma package. In *2011 International Conference on Electrical and Control Engineering (ICECE)*, pages 5759–5762. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, September 2011.
- Dehon:1994:CGC**
- [Deh94] Michel Dehon. Classifying geometries with Cayley. *Journal of Symbolic Computation*, 17(3):259–276, March 1994. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).
- Dewar:2003:CAS**
- [DGW<sup>+</sup>03] Michael Dewar, Johannes Grabmeier, Stephen Watt, Bernhard Kutzler, John Cannon, Bill Unger, Wolfgang Windsteiger, Jürgen

Gerhard, Andreas Sorgatz, Herbert Melenk, Sebastien Veigneau, David P. Jacobs, David Ford, Wolfgang Thomas, Jörgen Backelin, Svetlana Cojocaru, Victor Ufnarovski, Oliver Gloor, Jürgen Opgenorth, Wilhelm Plesken, Tilman Schulz, Ralf Hemmecke, Erik Hillgarter, Franz Winkler, Meinolf Geck, Frank Lübeck, Klaus Lux, Peter Dräxler, Rainer Nörenberg, Claire Di Crescenzo, Françoise Jung, Eckhard Pfälzer, Anton Betten, Reinhard Laue, Alfred Wassermann, Joachim Apel, Uwe Klaus, Robert H. Lewis, Erich Kaltofen, Thomas Breuer, Alexander Hulpke, Christian Bauer, Alexander Frink, Richard Kreckel, Nobuki Takayama, Johannes Buchmann, Thomas Pfahler, Marc A. A. van Leeuwen, Alan Head, Daniel R. Grayson, Michael E. Stillman, Kredel Heinz, Michael Pesch, Wendelin Degen, Gerhard Hiss, Karim Belabas, Wolfgang Kuechlin, Sarah Rees, Reinhard Bündgen, Olaf Delgado Friedrichs, Andreas W. M. Dress, Daniel H. Huson, Elaine Kant, Stan Steinberg, Curt Randall, Larry Akers, Bob Young, Robert L. Young, Minaz Punjani, Marc Conrad, Susanne Schmitt, Gert-Martin Greuel, Gerhard Pfister, Hans Schönemann, Weiguang Huang, Adalbert Kerber, Axel Kohnert, Bruno Buchberger, Tudor Jebelean, Allan Bonadio, M. F. Newman, Werner Nickel, Alice C. Niemeyer, E. A. O. Brien, Sebastian Egner, Markus Püschel, Thomas Beth, Hans-Gert Gräbe, Bruno Haible, Thomas Wolf, G. E. Prince, M. Jerie, Sergei Klioner, Thomas Hahn, Hagen Eck, Sepp Küblbeck, Leonard H. Soicher, Adalbert Kerber, Pierre Lescanne, Bogdan Popov, Oksana Laushnyk, A. Balfagón, and X. Jaén. Computer algebra systems. In Grabmeier et al. [GKW03], pages 261–483. ISBN 3-540-65466-6, 3-642-55826-7 (e-book). LCCN QA155.7.E4 C64954 2003eb. URL <http://www.loc.gov/catdir/enhancements/fy0817/2002190828-d.html>; <http://www.loc.gov/catdir/enhancements/fy0817/2002190828-t.html>.

Dockx:1991:CTC

- [DI91] Kris Dockx and Paul Igodt. Character tables and commutativity of normal subgroups. *SIGSAM Bulletin (ACM Special Interest Group on Symbolic and Algebraic Manipulation)*, 25(1):28–31, January 1991. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

DominguezPerez:2009:ICP

- [DKS09] Luis J. Dominguez Perez, Ezekiel J. Kachisa, and Michael Scott. Implementing cryptographic pairings: A Magma tutorial. IACR Cryptology ePrint Archive, 2009. URL <http://eprint.iacr.org/2009/072.pdf>.

- Dehon:2002:CCG**
- [DL02] Michel Dehon and Dimitri Leemans. Constructing coset geometries with MAGMA: an application to the sporadic groups  $M_{12}$  and  $J_1$ . *Atti del Seminario Matematico e Fisico dell'Università di Modena*, 50(2):415–427, 2002. CODEN ASMMAK. ISSN 0041-8986.
- Elsenhans:2016:CGG**
- [Els16] Andreas-Stephan Elsenhans. Computation of Galois groups in **magma**. In *Mathematical and computational approaches in advancing modern science and engineering*, pages 621–628. Springer, Cham, Switzerland, 2016.
- Erocal:2010:SPU**
- [ES10] Burçin Eröcal and William Stein. The Sage Project: Unifying free mathematical software to create a viable alternative to Magma, Maple, Mathematica and MATLAB. *Lecture Notes in Computer Science*, 6327:12–27, 2010. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic). URL [http://link.springer.com/content/pdf/10.1007/978-3-642-15582-6\\_4.pdf](http://link.springer.com/content/pdf/10.1007/978-3-642-15582-6_4.pdf).
- Faina:2001:DGC**
- [FG01] Giorgio Faina and Massimo Giulietti. Decoding Goppa codes with MAGMA. *Ars Combinatoria. The Canadian Journal of Combinatorics*, 61:221–232, 2001. CODEN ACOMDN. ISSN 0381-7032.
- Fieker:2006:ACF**
- [Fie06] Claus Fieker. Applications of the class field theory of global fields. In Bosma and Cannon [BC06], pages 31–62. ISBN 3-540-37632-1 (hardcover), 3-540-37634-8 (e-book). ISSN 1431-1550. LCCN QA155.7.E4 D57 2006. URL [http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7\\_2.pdf](http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7_2.pdf).
- Fukuda:2010:MSI**
- [FvdHJT10] Komei Fukuda, Joris van der Hoeven, Michael Joswig, and Nobuki Takayama, editors. *Mathematical software — ICMS 2010: third International Congress on Mathematical Software, Kobe, Japan, September 13–17, 2010: proceedings*, volume 6327 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2010. ISBN 3-642-15581-2 (paperback), 3-642-15582-0 (e-book). LCCN QA76.95 .I5654 2010. URL <http://www.springerlink.com/content/978-3-642-15581-9>.

- Gebhardt:2006:CAD**
- [Geb06] Volker Gebhardt. Computer aided discovery of a fast algorithm for testing conjugacy in braid groups. In Bosma and Cannon [BC06], pages 261–285. ISBN 3-540-37632-1 (hardcover), 3-540-37634-8 (e-book). ISSN 1431-1550. LCCN QA155.7.E4 D57 2006. URL [http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7\\_12.pdf](http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7_12.pdf).
- Giulietti:2000:ACF**
- [Giu00] Massimo Giulietti. Algebraic curves over finite fields and MAGMA. *Ital. J. Pure Appl. Math.*, 8:19–32, 2000. ISSN 1126-8042 (print), 2239-0227 (electronic).
- Goel:2022:IIR**
- [GJS22] Kriti Goel, Jack Jeffries, and Anurag K. Singh. The  $a$ -invariant of an invariant ring. In preparation., 2022.
- Grabmeier:2003:CAH**
- [GKW03] Johannes Grabmeier, Erich Kaltofen, and Volker Weispfenning, editors. *Computer algebra handbook: foundations, applications, systems*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2003. ISBN 3-540-65466-6, 3-642-55826-7 (e-book). xx + 637 pp. LCCN QA155.7.E4 C64954 2003eb. URL <http://www.loc.gov/catdir/enhancements/fy0817/2002190828-d.html>; <http://www.loc.gov/catdir/enhancements/fy0817/2002190828-t.html>.
- Glasby:1991:EGD**
- [Gla91] S. P. Glasby. Extensions of groups defined by power-commutator presentations. *SIGSAM Bulletin (ACM Special Interest Group on Symbolic and Algebraic Manipulation)*, 25(1):32–35, January 1991. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).
- Ganzha:2005:CAS**
- [GMV05] Victor G. Ganzha, Ernst W. Mayr, and Evgenii V. Vorozhtsov, editors. *Computer algebra in scientific computing: 8th international workshop, CASC 2005, Kalamata, Greece, September 12–16, 2005: proceedings*, volume 3718 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2005. CODEN LNCSD9. ISBN 3-540-28966-6. ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN ???? URL <http://www.springerlink.com/content/978-3-540-28966-1>;

<http://www.springerlink.com/openurl.asp?genre=issue&issn=0302-9743&volume=3718>.

**Gollan:1991:MRP**

- [Gol91] Holger W. Gollan. The 2-modular representation of  $J_1$  in the principal block. *SIGSAM Bulletin (ACM Special Interest Group on Symbolic and Algebraic Manipulation)*, 25(1):36–39, January 1991. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

**Gaston:2008:DAM**

- [GPV08] B. Gastón, J. Pujol, and M. Villanueva. Development of algorithmic methods for binary non-linear codes in MAGMA. In *Sixth Conference on Discrete Mathematics and Computer Science (Spanish)*, pages 345–351. Univ. Lleida, Lleida, 2008.

**Grams:1991:SGR**

- [Gra91] Gerhard Grams. Special generators and relations for some orthogonal and symplectic groups over GF(2). *SIGSAM Bulletin (ACM Special Interest Group on Symbolic and Algebraic Manipulation)*, 25(1):39–45, January 1991. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

**Grassl:2006:SLC**

- [Gra06] Markus Grassl. Searching for linear codes with large minimum distance. In Bosma and Cannon [BC06], pages 287–313. ISBN 3-540-37632-1 (hardcover), 3-540-37634-8 (e-book). ISSN 1431-1550. LCCN QA155.7.E4 D57 2006. URL [http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7\\_13.pdf](http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7_13.pdf).

**Havas:1991:CES**

- [Hav91] George Havas. Coset enumeration strategies. In Watt [Wat91], pages 191–199. ISBN 0-89791-437-6. LCCN QA 76.95 I59 1991. URL <http://www.acm.org:80/pubs/citations/proceedings/issac/120694/p191-havas/>.

**Hochster:2022:WNE**

- [HJPS22] Melvin Hochster, Jack Jeffries, Vaibhav Pandey, and Anurag K. Singh. When are the natural embeddings of classical invariant rings pure? In preparation., 2022.

**Holt:2006:CGE**

- [Hol06] Derek F. Holt. Cohomology and group extensions in Magma. In Bosma and Cannon [BC06], pages 221–241. ISBN 3-540-

37632-1 (hardcover), 3-540-37634-8 (e-book). ISSN 1431-1550. LCCN QA155.7.E4 D57 2006. URL [http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7\\_10.pdf](http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7_10.pdf).

**Havel:1989:PGA**

- [HSW89] T. F. Havel, B. Sturmfels, and N. White. Proposal for a geometric algebra software package. *SIGSAM Bulletin (ACM Special Interest Group on Symbolic and Algebraic Manipulation)*, 23(1):13–15, January 1989. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

**Hong:2014:MSI**

- [HY14] Hoon Hong and Chee Yap, editors. *Mathematical Software — ICMS 2014: 4th International Conference, Seoul, South Korea, August 5–9, 2014, Proceedings*, volume 8592. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2014. ISBN 3-662-44198-5 (paperback), 3-662-44199-3 (e-book). LCCN QA76.9.M35.

**Jeffrey:2008:PAM**

- [Jef08] David Jeffrey, editor. *Proceedings of the 21st annual meeting of the International Symposium on Symbolic Computation, ISSAC 2008, July 20–23, 2008, Hagenberg, Austria*. ACM Press, New York, NY 10036, USA, 2008. ISBN 1-59593-904-0. LCCN ????

**Joyner:2008:SCT**

- [JM08] David Joyner and Robert Miller. SAGE and coding theory (abstract only). *ACM Communications in Computer Algebra*, 42(1–2):74–78, March/June 2008. CODEN ??? ISSN 1932-2232 (print), 1932-2240 (electronic).

**Jamali:1991:LSG**

- [JR91] A. R. Jamali and E. F. Robertson. A library of simple groups: permutations, presentations, conjugacy classes, maximal subgroups and Sylow subgroups. *SIGSAM Bulletin (ACM Special Interest Group on Symbolic and Algebraic Manipulation)*, 25(1):46–49, January 1991. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

**Kemper:1997:CIM**

- [Kem97] Gregor Kemper. Calculating invariants of modular reflection groups with Magma. Where was this published??, 1997.

**Key:2001:SAM**

- [Key01] J. D. Key. Some applications of Magma in designs and codes: Oval designs, Hermitian unitals and generalized Reed–Muller codes. *Journal of Symbolic Computation*, 31(1–2):37–53, January/February 2001. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic). URL <http://www.idealibrary.com/links/doi/10.1006/jsco.1999.1007>; <http://www.idealibrary.com/links/doi/10.1006/jsco.1999.1007/pdf>; <http://www.idealibrary.com/links/doi/10.1006/jsco.1999.1007/ref>.

**Kida:2010:CAS**

- [Kid10] Masanari Kida. Computing algebraic structures with Magma. In *Algebraic number theory and related topics 2008*, RIMS Kôkyûroku Bessatsu, B19, pages 107–116. Res. Inst. Math. Sci. (RIMS), Kyoto, 2010.

**Klin:2009:AAC**

- [KJJ<sup>+</sup>09] Mikhail Klin, Gareth Aneurin Jones, Aleksandar Jurisić, Mikhail Muzychuk, and Ilia Ponomarenko, editors. *Algorithmic algebraic combinatorics and Gröbner bases*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2009. ISBN 3-642-01959-5, 3-642-01960-9 (e). xii + 311 pp. LCCN QA164.A427 2009. URL <http://www.loc.gov/catdir/enhancements/fy1203/2009927505-b.html>; <http://www.loc.gov/catdir/enhancements/fy1203/2009927505-d.html>; <http://www.loc.gov/catdir/enhancements/fy1402/2009927505-t.html>.

**Koprowski:2020:cmp**

- [Kop20] Przemysław Koprowski. CQF Magma package. *ACM Communications in Computer Algebra*, 54(2):53–56, September 2020. CODEN ????. ISSN 1932-2232 (print), 1932-2240 (electronic). URL <https://dl.acm.org/doi/10.1145/3427218.3427224>.

**Koprowski:2025:AQM**

- [Kop25] Przemysław Koprowski. Algorithm 1056: qPoly — a Magma package for working with quaternionic polynomials. *ACM Transactions on Mathematical Software*, 51(2):13:1–13:??, June 2025. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).

**Kao:2022:FTL**

- [KOT22] Chiu-Yen Kao, Braxton Osting, and Jackson C. Turner. Flat tori with large Laplacian eigenvalues in dimensions up to eight.

*arXiv.org*, ??(??):18, February 16, 2022. URL <http://arxiv.org/abs/2202.08351>.

**Lee:2014:MID**

- [Lee14] Kwankyu Lee. Magma implementation of decoding algorithms for general algebraic geometry codes. In Hong and Yap [HY14], pages 119–123. ISBN 3-662-44198-5 (paperback), 3-662-44199-3 (e-book). LCCN QA76.9.M35.

**Lieby:2006:CPG**

- [Lie06] Paulette Lieby. Colouring planar graphs. In Bosma and Cannon [BC06], pages 315–330. ISBN 3-540-37632-1 (hardcover), 3-540-37634-8 (e-book). ISSN 1431-1550. LCCN QA155.7.E4 D57 2006. URL [http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7\\_14.pdf](http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7_14.pdf).

**Lucchini:1994:CSG**

- [LM94] Andrea Lucchini and Federico Menegazzo. Computing a set of generators of minimal cardinality in a solvable group. *Journal of Symbolic Computation*, 17(5):409–420, May 1994. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

**Li:2008:HPS**

- [LMRS08] Xin Li, M. M. Maza, R. Rasheed, and E. Schost. High-performance symbolic computation in a hybrid compiled-interpreted programming environment. In *ICCSA '08. International Conference on Computational Sciences and Its Applications, 2008*, pages 331–341. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, June 2008.

**Li:2007:VGP**

- [LMS07] Xin Li, Marc Moreno Maza, and Éric Schost. On the virtues of generic programming for symbolic computation. In Shi et al. [SvADS07], pages 251–258. CODEN LNCSD9. ISBN 3-540-72585-7 (print), 3-540-72586-5 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN ???? URL <http://www.springerlink.com/content/978-3-540-72586-2>.

**Lundstrom:2014:GMG**

- [Lun14] Patrik Lundström. Good Magma gradings on rings. *Communications in Algebra*, 42(12):5357–5373, 2014. CODEN COALDM. ISSN 0092-7872 (print), 1532-4125 (electronic).

**Lewis:1999:CPO**

- [LW99] Robert H. Lewis and Michael Wester. Comparison of polynomial-oriented computer algebra systems. *SIGSAM Bulletin (ACM Special Interest Group on Symbolic and Algebraic Manipulation)*, 33(4):5–13, December 1999. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

**Li:2003:ASPa**

- [LW03a] Hongbo Li and Yihong Wu. Automated short proof generation for projective geometric theorems with Cayley and bracket algebras: I. Incidence geometry. *Journal of Symbolic Computation*, 36(5):717–762, November 2003. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

**Li:2003:ASPb**

- [LW03b] Hongbo Li and Yihong Wu. Automated short proof generation for projective geometric theorems with Cayley and bracket algebras: II. Conic geometry. *Journal of Symbolic Computation*, 36(5):763–809, November 2003. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

**Monagan:2010:SPM**

- [MP10] Michael Monagan and Roman Pearce. Sparse polynomial multiplication and division in Maple 14. *ACM Communications in Computer Algebra*, 44(4):205–209, December 2010. CODEN ???? ISSN 1932-2232 (print), 1932-2240 (electronic).

**McMillan:1991:DSA**

- [MW91] Tim McMillan and Neil L. White. The dotted straightening algorithm. *Journal of Symbolic Computation*, 11(5–6):471–482, May–June 1991. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic). Invariant-theoretic algorithms in geometry (Minneapolis, MN, 1987).

**Newman:1991:WLS**

- [NO91] M. F. Newman and E. A. O’Brien. The Wielandt length of some 3-groups. *SIGSAM Bulletin (ACM Special Interest Group on Symbolic and Algebraic Manipulation)*, 25(1):50–51, January 1991. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

**OBrien:1991:PEA**

- [O'B91] E. A. O'Brien. Providing electronic access to group descriptions. *SIGSAM Bulletin (ACM Special Interest Group on Symbolic and Algebraic Manipulation)*, 25(1):52–56, January 1991. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

**OShea:2007:IVA**

- [OLC<sup>+</sup>07] Donal O'Shea, John B. Mathematiker Little, David Archibald Mathématicien Cox, fre, David Archibald Mathematiker Cox, ger, and David Archibald Mathematician Cox, eng. *Ideals, varieties, and algorithms: an introduction to computational algebraic geometry and commutative algebra.* Undergraduate texts in mathematics. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., third edition, 2007. ISBN 0-387-35650-9, 0-387-35651-7 (e-book). xv + 552 pp. LCCN ???? URL [http://sfx.ethz.ch/sfx\\\_locater?sid=ALEPH:EBI01&genre=book&isbn=978-0-387-35650-1&id=doi:10.1007/978-0-387-35651-8](http://sfx.ethz.ch/sfx\_locater?sid=ALEPH:EBI01&genre=book&isbn=978-0-387-35650-1&id=doi:10.1007/978-0-387-35651-8).

**Parrochia:2013:TGT**

- [PN13] Daniel Parrochia and Pierre Neuville. *Towards a general theory of classifications.* Studies in universal logic. Birkhäuser, Cambridge, MA, USA; Berlin, Germany; Basel, Switzerland, 2013. ISBN 3-0348-0608-6 (softcover), 3-0348-0609-4 (e-book). xxiii + 304 pp. LCCN ????

**Roney-Dougal:2006:CPP**

- [RDU06] Colva M. Roney-Dougal and William R. Unger. Computing the primitive permutation groups of degree less than 1000. In Bosma and Cannon [BC06], pages 243–260. ISBN 3-540-37632-1 (hardcover), 3-540-37634-8 (e-book). ISSN 1431-1550. LCCN QA155.7.E4 D57 2006. URL [http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7\\_11.pdf](http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7_11.pdf).

**Richardson:1992:BBP**

- [Ric92] J. Richardson. The Blockhandler and the Bitfield package. *Journal of Symbolic Computation*, 14(1):93–102 (or 93–101??), July 1992. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic).

**Royle:1991:CVT**

- [Roy91] Gordon F. Royle. Constructing the vertex-transitive graphs on 24 vertices. *SIGSAM Bulletin (ACM Special Interest Group on*

*Symbolic and Algebraic Manipulation)*, 25(1):56–59, January 1991. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

**Sandling:1991:GRP**

- [San91] Robert Sandling. A group ring package for Cayley. *SIGSAM Bulletin (ACM Special Interest Group on Symbolic and Algebraic Manipulation)*, 25(1):60–64, January 1991. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

**Schneider:1990:CER**

- [Sch90] Gerhard J. A. Schneider. Computing with endomorphism rings of modular representations. *Journal of Symbolic Computation*, 9(5–6):607–636, May–June 1990. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic). Computational group theory, Part I.

**Schneider:1991:RTC**

- [Sch91] Gerhard J. A. Schneider. Representation theory in CAYLEY: tools and algorithms. *SIGSAM Bulletin (ACM Special Interest Group on Symbolic and Algebraic Manipulation)*, 25(1):64–70, January 1991. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

**Slattery:1991:CDG**

- [Sla91] Michael C. Slattery. Character degrees of  $p$ -groups: a case study. *SIGSAM Bulletin (ACM Special Interest Group on Symbolic and Algebraic Manipulation)*, 25(1):71–74, January 1991. CODEN SIGSBZ. ISSN 0163-5824 (print), 1557-9492 (electronic).

**Smertnig:2014:FTM**

- [Sme14] Daniel Smertnig. *Factorization Theory in Maximal Orders*. Ph.D. thesis, Institut für Mathematik und Wissenschaftliches Rechnen, Naturwissenschaftliche Fakultät, Universität Graz, Graz, Austria, February 2014. URL <http://permalink.obvsg.at/AC11698360>.

**Stein:2006:SBS**

- [Ste06] William Stein. Studying the Birch and Swinnerton-Dyer conjecture for modular abelian varieties using Magma. In Bosma and Cannon [BC06], pages 93–116. ISBN 3-540-37632-1 (hardcover), 3-540-37634-8 (e-book). ISSN 1431-1550. LCCN QA155.7.E4 D57 2006. URL [http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7\\_4.pdf](http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7_4.pdf).

- Stein:2008:CWC**
- [Ste08] William A. Stein. Can we create a viable free open source alternative to Magma, Maple, Mathematica and Matlab? In Jeffrey [Jef08], pages 5–6. ISBN 1-59593-904-0. LCCN ????
- Stein:2013:SCV**
- [Ste13] William Stein. Sage: creating a viable free open source alternative to Magma, Maple, Mathematica, and MATLAB. In Felipe Cucker, Teresa Krick, Allan Pinkus, and Agnes Szanto, editors, *Foundations of computational mathematics, Budapest 2011*, volume 403 of *London Mathematical Society lecture note series*, pages 230–238. Cambridge University Press, Cambridge, UK, 2013. ISBN 1-107-60407-9 (paperback), 1-139-09540-4 (e-book), 1-139-61690-0. LCCN QA297 .F635 2011.
- Steel:2015:DSM**
- [Ste15] Allan Steel. Direct solution of the  $(11, 9, 8)$ -MinRank problem by the block Wiedemann algorithm in Magma with a Tesla GPU. In *PASCO’2015 — Proceedings of the 2015 International Workshop on Parallel Symbolic Computation*, pages 2–6. ACM Press, New York, NY 10036, USA, 2015.
- Sutherland:2017:DCG**
- [Sut17] Nicole Sutherland. A demonstration of computing Galois groups of polynomials in Magma. *ACM Communications in Computer Algebra*, 51(3):81–82, September 2017. CODEN ??? ISSN 1932-2232 (print), 1932-2240 (electronic).
- Shi:2007:CSIb**
- [SvADS07] Yong Shi, Geert Dick van Albada, Jack Dongarra, and Peter M. A. Sloot, editors. *Computational Science — ICCS 2007: 7th International Conference, Beijing, China, May 27 — 30, 2007, Proceedings, Part II*, volume 4488 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2007. CODEN LNCS9. ISBN 3-540-72585-7 (print), 3-540-72586-5 (e-book). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN ??? URL <http://www.springerlink.com/content/978-3-540-72586-2>.
- Sturmfels:1991:SFP**
- [SW91] Bernd Sturmfels and Walter Whiteley. On the synthetic factorization of projectively invariant polynomials. *Journal of Symbolic Computation*, 11(5–6):439–454 (or 439–453??), May–June

1991. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic). Invariant-theoretic algorithms in geometry (Minneapolis, MN, 1987).

**Taylor:2006:CSO**

- [Tay06] Donald E. Taylor. Constructing the split octonions. In Bosma and Cannon [BC06], pages 161–185. ISBN 3-540-37632-1 (hardcover), 3-540-37634-8 (e-book). ISSN 1431-1550. LCCN QA155.7.E4 D57 2006. URL [http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7\\_7.pdf](http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7_7.pdf).

**Thiel:2015:CCA**

- [Thi15] U. Thiel. Champ: a Cherednik algebra Magma package. *LMS Journal of Computation and Mathematics*, 18(1):266–307, 2015. CODEN ???? ISSN 1461-1570.

**vanWamelen:2006:CAJ**

- [vW06] Paul B. van Wamelen. Computing with the analytic Jacobian of a genus 2 curve. In Bosma and Cannon [BC06], pages 117–135. ISBN 3-540-37632-1 (hardcover), 3-540-37634-8 (e-book). ISSN 1431-1550. LCCN QA155.7.E4 D57 2006. URL [http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7\\_5.pdf](http://link.springer.com/content/pdf/10.1007/978-3-540-37634-7_5.pdf).

**Waki:1995:IM**

- [Wak95] Katsushi Waki. An introduction to Magma. In Matu-Tarow Noda, editor, *Research on the theory and applications of computer algebra. Proceedings of a symposium held at the Research Institute for Mathematical Sciences, Kyoto University, Kyoto, Japan, November 16–18, 1994*, volume 920 of *RIMS Kokyuroku*, pages 173–179. Kyoto University, Kyoto, Japan, 1995.

**Watt:1991:IPI**

- [Wat91] Stephen M. Watt, editor. *ISSAC '91: proceedings of the 1991 International Symposium on Symbolic and Algebraic Computation, July 15–17, 1991, Bonn, Germany*. ACM Press, New York, NY 10036, USA, 1991. ISBN 0-89791-437-6. LCCN QA 76.95 I59 1991.

**Wester:1999:CAS**

- [Wes99] Michael J. Wester, editor. *Computer algebra systems: a practical guide*. John Wiley, New York, NY, USA, 1999. ISBN 0-471-98353-5. xvi + 436 pp. LCCN QA155.7.E4 W48 1999. URL <http://>

[www.loc.gov/catdir/description/wiley033/99021149.html](http://www.loc.gov/catdir/description/wiley033/99021149.html);  
<http://www.loc.gov/catdir/toc/onix03/99021149.html>.

**White:1991:MCF**

- [Whi91] Neil L. White. Multilinear Cayley factorization. *Journal of Symbolic Computation*, 11(5–6):421–438, May–June 1991. CODEN JSYCEH. ISSN 0747-7171 (print), 1095-855X (electronic). Invariant-theoretic algorithms in geometry (Minneapolis, MN, 1987).