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- [1] M. D. Atkinson, *The complexity of algorithms*, Computing Tomorrow, Cambridge Univ. Press, Cambridge, 1996, pp. 1–20. MR MR1441314
- [2] Clemens Ballarin, Computer algebra and thereom proving, PhD Thesis, University of Cambridge, 1999.
- [3] Clemens Ballarin, Jacques Calmet, and Peter Kullmann, Integration of deduction and computation, 2000.
- [4] Michael J. Beeson, *The mechanization of mathematics*, Alan Turing: Life and Legacy of a Great Thinker, Springer, Berlin, 2004, pp. 77–134. MR MR2172456
- [5] J. Borwein and P. Borwein, *Challenges in mathematical computing*, Computing in Science and Engineering 3 (2001), 48–53.
- [6] Wieb Bosma and John Cannon (eds.), Discovering Mathematics with Magma, Algorithms and Computation in Mathematics, vol. 19, Springer-Verlag, Berlin, 2006, Reducing the abstract to the concrete. MR MR2265375
- [7] Bonifacio Castano, Joos Heintzb, Juan Llovet, and Raquel Martinez, On the data structure straight-line program and its implementation in symbolic computation, Mathematics and Computers in Simulation 51 (2000), no. 5, 497–528.
- [8] Henri Cohen, A Course in Computational Algebraic Number Theory, Graduate Texts in Mathematics, vol. 138, Springer-Verlag, Berlin, 1993. MR MR1228206 (94i:11105)
- [9] Marston Conder, Semi-automated theorem proving the impact of computers on research in pure mathematics, Proceedings of the First Asian Technology Conference in Mathematics. Singapore, December 1995, 1995, pp. 1–8.
- [10] James H. Davenport, Abstract data types in computer algebra, Mathematical Foundations of Computer Science 2000 (Bratislava), Lecture Notes in Comput. Sci., vol. 1893, Springer, Berlin, 2000, pp. 21–35. MR MR1844731
- [11] _____, Equality in computer algebra and beyond, J. Symbolic Comput. 34 (2002), no. 4, 259–270. MR MR1946634 (2003m:68188)

- [12] Wolfram Decker, Some introductory remarks on computer algebra, European Congress of Mathematics, Vol. II (Barcelona, 2000), Progr. Math., vol. 202, Birkhäuser, Basel, 2001, pp. 121–142. MR MR1905355
- [13] Derek F. Holt, Bettina Eick, and Eamonn A. O'Brien, Handbook of Computational Group Theory, Discrete Mathematics and its Applications (Boca Raton), Chapman & Hall/CRC, Boca Raton, FL, 2005. MR MR2129747 (2006f:20001)
- [14] S. Marcugini and F. Pambianco, Minimal 1-saturating sets in PG(2, q), $q \le 16$, Australas. J. Combin. **28** (2003), 161–169. MR MR1998870 (2004g:51010)
- [15] José M. Martín-García, xPerm: Fast index canonicalization for tensor computer algebra, Comput. Phys. Comm. 179 (2008), no. 8, 597 603.
- [16] V. Niculescu and G.S. Moldovan, Building an object oriented computational algebra system based on design patterns, SYNASC 2005: Symbolic and Numeric Algorithms for Scientific Computing, 2005, 2005.
- [17] S. Petitjean, Algebraic geometry and computer vision: Polynomial systems, real and complex roots, J. Math. Imaging Vision 10 (1999), no. 3, 191–220. MR MR1695944 (2001e:68197)
- [18] Cheryl E. Praeger, Computers in algebra: New answers, new questions, J. Korean Math. Soc. 38 (2001), no. 4, 763–780, Mathematics in the new millennium (Seoul, 2000). MR MR1838096 (2002d:20002)
- [19] Katsushi Waki, An introduction to magma (japanese), Noda, Matu-Tarow (ed.). 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., RIMS Kokyuroku, vol. 920, Kyoto University, Kyoto, 1995, pp. 173–179. MR)
- [20] Jian Xu, MEI A module system for mechanized mathematics, Phd, McMasters University, 2008.