Symbolic and Computational Algebra
68W30

[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* $\mathrm{PG}(2, q)$, $q \leq 16$, 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.