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- [1] Victor Aladjev, *Computer algebra system Maple: A new software library*, Proceedings of the International Conference held in Melbourne and St. Petersburg, June 2-4, 2003 (Peter M. A. Sloot, David Abramson, Alexander V. Bogdanov, Jack J. Dongarra, Albert Y. Zomaya, and Yuriy E. Gorbachev, eds.), Lecture Notes in Computer Science, vol. 2657, Springer-Verlag, Berlin, 2003, pp. lvi+1095. MR MR2086553 (2005c:00014)
- [2] Joseph L. Awange and Erik W. Grafarend, *Solving Algebraic Computational Problems in Geodesy and Geoinformatics*, Springer-Verlag, Berlin, 2005, The answer to modern challenges. MR MR2139870 (2006b:86022)
- [3] 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
- [4] Wieb Bosma, John Cannon, and Catherine Playoust, *The Magma algebra system. I. The user language*, J. Symbolic Comput. **24** (1997), no. 3-4, 235–265, Computational algebra and number theory (London, 1993). MR MR1484478
- [5] Gregory Butler and John J. Cannon, *Cayley, Version 4: The user language*, ISSAC '88: Proceedings of the 1988 International Symposium on Symbolic and Algebraic Computation (Berlin), vol. 358, Springer-Verlag, 1988, pp. 456–466.
- [6] John Cannon and Catherine Playoust, *Magma: A new computer algebra system*, Euromath Bull. **2** (1996), no. 1, 113–144. MR MR1413180
- [7] Olga Caprotti, James H. Davenport, Mike Dewar, and Julian Padget, *Mathematics on the (Semantic) NET*, The Semantic Web: Research and Applications, Lecture Notes in Comput. Sci., vol. 3053, 2004, pp. 213–224.
- [8] Martin Clayton, *Computer algebra software*, 1997.
- [9] Gene Cooperman, *Parallel GAP: Mature interactive parallel computing*, Groups and computation, III (Columbus, OH, 1999), Ohio State Univ. Math. Res. Inst. Publ., vol. 8, de Gruyter, Berlin, 2001, pp. 123–138. MR MR1829475 (2002d:20001)

- [10] M. Daberkow, C. Fieker, J. Klüners, M. Pohst, K. Roegner, M. Schörnig, and K. Wildanger, *KANT V4*, J. Symbolic Comput. **24** (1997), no. 3-4, 267–283, Computational algebra and number theory (London, 1993). MR MR1484479 (99g:11150)
- [11] James H. Davenport, *A small OpenMath type system*, SIGSAM Bull. **34** (2000), no. 2, 16–21.
- [12] James H. Davenport, *Equality in computer algebra and beyond*, J. Symbolic Comput. **34** (2002), no. 4, 259–270. MR MR1946634 (2003m:68188)
- [13] 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
- [14] Ian P. Gent, Warwick Harvey, Tom Kelsey, and Steve Linton, *Generic SBDD using computational group theory*, Principles and Practice of Constraint Programming, CP 2003: 9th International Conference, CP 2003, Kinsale, Ireland, September 29–October 3, 2003, Proceedings, Lecture Notes in Comput. Sci., vol. 2833, Springer, Berlin, 2003, pp. 333–347.
- [15] Florent Hivert and Nicolas M. Thiéry, *MuPAD-Combinat, an open-source package for research in algebraic combinatorics*, Sém. Lothar. Combin. **51** (2004/05), Art. B51z, 70 pp. (electronic). MR MR2080390 (2005c:05001)
- [16] David Joyner and William Stein, *SAGE: System for algebra and geometry experimentation*, SIGSAM Bull. **39** (2005), no. 2, 61–64.
- [17] Robert H. Lewis and Michael Wester, *Comparison of polynomial-oriented computer algebra systems*, SIGSAM Bull. **33** (1999), no. 4, 5–13.
- [18] J. Neubüser, H. Pahlings, and W. Plesken, *CAS; design and use of a system for the handling of characters of finite groups*, Computational Group Theory (Durham, 1982), Academic Press, London, 1984, pp. 195–247. MR MR760658 (86i:20004)
- [19] Virginia Niculescu, *OOLACA: An object oriented library for abstract and computational algebra*, OOPSLA ’04: Companion to the 19th annual ACM SIGPLAN conference on Object-oriented programming systems, languages, and applications (New York, NY, USA), ACM Press, 2004, pp. 160–161.

- [20] Virgile Prevosto and Damien Doligez, *Algorithms and proofs inheritance in the Foc language*, J. Automat. Reason. **29** (2002), no. 3-4, 337–363, Mechanizing and automating mathematics: in honor of N. G. de Bruijn. MR MR1966959 (2004b:68196)
- [21] I. I. Reznikov and V. I. Sushchanskii, *A software system for growth analysis of Mealy automata*, Cybernetics and Systems Analysis **42** (2006), no. 2, 265–276.
- [22] Fritz Schwarz, *ALL TYPES: An algebraic language and type system*, Artificial Intelligence and Symbolic Computation: International Conference AISC'98, Plattsburgh, New York, USA, September 1998. Proceedings, Lecture Notes in Computer Science, vol. 1476, Springer, Berlin, 1998, p. 270.
- [23] Stephen M. Watt, Peter A. Broadbery, Samuel S. Dooley, Pietro Iglio, Scott C. Morrison, Jonathan M. Steinbach, and Robert S. Sutor, *A first report on the A Sharp compiler*, von zur Gathen, Joachim and Giesbrecht, Mark (ed.), ISSAC '94. Proceedings of the 1994 International Symposium on Symbolic and Algebraic Computation. Oxford, U.K., July 20–22, 1994. New York, NY: ACM Press, 1994, pp. 25–31.
- [24] André Yamba Yamba, Krister Ahlander, and Malin Ljungberg, *Designing for geometrical symmetry exploitation*, Scientific Programming **14** (2006), no. 2, 61–80.