

Computational Methods

14-04, 14Qxx

- [1] Fatima K. Abu Salem and Kamal Khuri-Makdisi, *Fast Jacobian group operations for $C_{3,4}$ curves over a large finite field*, LMS J. Comput. Math. **10** (2007), 307–328 (electronic). MR MR2335723
- [2] S. Arita, S. Miura, and T. Sekiguchi, *An addition algorithm on the Jacobian varieties of curves*, J. Ramanujan Math. Soc. **19** (2004), no. 4, 235–251. MR MR2125500 (2005m:14114)
- [3] Tobias Beck and Josef Schicho, *Adjoint computation for hypersurfaces using formal desingularizations*, J. Algebra **320** (2008), no. 11, 3984–3996. MR MR2464803 (2009k:14029)
- [4] ———, *Curve parametrization over optimal field extensions exploiting the Newton polygon*, Geometric Modeling and Algebraic Geometry, Springer, Berlin, 2008, pp. 119–140. MR MR2381607 (2009b:65032)
- [5] Gavin Brown, *A database of polarized K3 surfaces*, Experiment. Math. **16** (2007), no. 1, 7–20. MR MR2312974
- [6] Gavin Brown and Daniel Ryder, *Elliptic fibrations on cubic surfaces*, J. Pure Appl. Algebra **214** (2010), no. 4, 410–421. MR MR2558749
- [7] Gavin Brown and Kaori Suzuki, *Computing certain Fano 3-folds*, Japan J. Indust. Appl. Math. **24** (2007), no. 3, 241–250. MR MR2374989 (2008j:14076)
- [8] Laurent Busé and Marc Chardin, *Implicitizing rational hypersurfaces using approximation complexes*, J. Symbolic Comput. **40** (2005), no. 4-5, 1150–1168. MR MR2172855 (2006g:14097)
- [9] Gweltaz Chatel and David Lubicz, *A point counting algorithm using cohomology with compact support*, 2008.
- [10] David A. Cox, John Little, and Donal O’Shea, *Using Algebraic Geometry*, second ed., Graduate Texts in Mathematics, vol. 185, Springer, New York, 2005. MR MR2122859 (2005i:13037)

- [11] Willem A. de Graaf, *Constructing algebraic groups from their Lie algebras*, J. Symbolic Comput. **44** (2009), no. 9, 1223–1233.
- [12] Willem A. de Graaf, Michael Harrison, Jana Pílníková, and Josef Schicho, *A Lie algebra method for rational parametrization of Severi-Brauer surfaces*, J. Algebra **303** (2006), no. 2, 514–529. MR MR2255120 (2007e:14058)
- [13] Wolfram Decker and Christoph Lossen, *Computing in algebraic geometry*, Algorithms and Computation in Mathematics, vol. 16, Springer-Verlag, Berlin, 2006, A quick start using SINGULAR. MR MR2220403 (2007b:14129)
- [14] André Galligo and David Rupprecht, *Irreducible decomposition of curves*, J. Symbolic Comput. **33** (2002), no. 5, 661–677, Computer algebra (London, ON, 2001). MR MR1919909 (2003h:14091)
- [15] Ralf Gerkmann, Mao Sheng, and Kang Zuo, *Computational details on the disproof of modularity*, 2007.
- [16] Martine Girard and Leopoldo Kulesz, *Computation of sets of rational points of genus-3 curves via the Demjanenko-Manin method*, LMS J. Comput. Math. **8** (2005), 267–300 (electronic). MR MR2193214
- [17] Massimo Giulietti, *Algebraic curves over finite fields and MAGMA*, Ital. J. Pure Appl. Math. (2000), no. 8, 19–32. MR MR1793739 (2001i:14082)
- [18] Michael Harrison and Josef Schicho, *Rational parametrisation for degree 6 Del Pezzo surfaces using Lie algebras*, ISSAC 2006, ACM, New York, 2006, pp. 132–137. MR MR2289111
- [19] Hendrik Hubrechts, *Memory efficient hyperelliptic curve point counting*, 2006.
- [20] Gabriela Jeronimo, Teresa Krick, Juan Sabia, and Martín Sombra, *The computational complexity of the Chow form*, Found. Comput. Math. **4** (2004), no. 1, 41–117. MR MR2035410 (2005c:14083)
- [21] Tanja Lange, *Formulae for arithmetic on genus 2 hyperelliptic curves*, Appl. Algebra Engrg. Comm. Comput. **15** (2005), no. 5, 295–328. MR MR2122308 (2005j:14082)
- [22] Alan G. B. Lauder, *A recursive method for computing zeta functions of varieties*, LMS J. Comput. Math. **9** (2006), 222–269 (electronic). MR MR2261044 (2007g:14022)

- [23] Walter D. Neumann and Penelope G. Wightwick, *Algorithms for polynomials in two variables*, Combinatorial and Computational Algebra (Hong Kong, 1999), Contemp. Math., vol. 264, Amer. Math. Soc., Providence, RI, 2000, pp. 219–235. MR MR1800698 (2002g:14091)
- [24] Jana Pílníková, *Parametrizing algebraic varieties using Lie algebras*, 2006.
- [25] Carlos Rito, *On equations of double planes with $p_g = q = 1$* , Math. Comp **79** (2010), 1091–1108.
- [26] ———, *On the computation of singular plane curves and quartic surfaces*, 2010.
- [27] Mohab Safey El Din, *Testing sign conditions on a multivariate polynomial and applications*, Math. Comput. Sci. **1** (2007), no. 1, 177–207. MR MR2384818
- [28] Mohab Safey El Din and Éric Schost, *Properness defects of projections and computation of at least one point in each connected component of a real algebraic set*, Discrete Comput. Geom. **32** (2004), no. 3, 417–430. MR MR2081634 (2005h:14136)
- [29] Tanush Shaska, *Computational algebra and algebraic curves*, Comm. Comp. Alg. **37** (2003), no. 4, 117–124.
- [30] Dongming Wang, *Decomposing algebraic varieties*, Automated Deduction in Geometry (Beijing, 1998), Lecture Notes in Comput. Sci., vol. 1669, Springer, Berlin, 1999, pp. 180–206. MR MR1775951 (2001f:68144)