

## BIBLIOGRAPHY

1. A. O. L. Atkin and J. Lehner, *Hecke operators on  $\Gamma_0(m)$* , Math. Ann. **185** (1970), 134–160.
2. B. J. Birch and W. Kuyk (eds.), *Modular Functions of One Variable IV*, Lecture Notes in Mathematics 476, Springer-Verlag, 1975.
3. B. J. Birch and H. P. F. Swinnerton-Dyer, *Notes on elliptic curves. I.*, J. Reine Angew. Math. **212** (1963), 7–25.
4. A. Brumer and K. Kramer, *The rank of elliptic curves*, Duke Math. J. **44** (1977), 715–743.
5. J. P. Buhler and B. H. Gross, *Arithmetic on curves with complex multiplication. II*, Invent. Math. **79** (1985), 11–29.
6. J. P. Buhler, B. H. Gross and D. B. Zagier, *On the conjecture of Birch and Swinnerton Dyer for an elliptic curve of rank 3*, Math. Comp. **44** (1985), 473–481.
7. H. Carayol, *Sur les représentations  $l$ -adiques attachées aux formes modulaires de Hilbert*, C. R. Acad. Sc. Paris **296** (1983), 629.
8. J. W. S. Cassels, *Elliptic curves*, LMS Student Texts, Cambridge University Press, 1991.
9. H. Cohen, *A Course in Computational Algebraic Number Theory*, Graduate Texts in Mathematics 138, Springer-Verlag, 1993.
10. I. Connell, *Notes on elliptic curves*, (Unpublished lecture notes, McGill University), 1991.
11. D. Cox, *The arithmetic-geometric mean of Gauss*, l’Enseignement Math. **30** (1984), 270–330.
12. J. E. Cremona, *Hyperbolic tessellations, modular symbols, and elliptic curves over complex quadratic fields*, Compositio Math. **51** (1984), 275–323.
13. J. E. Cremona, *Hyperbolic tessellations, modular symbols, and elliptic curves over complex quadratic fields (Addendum and Errata)*, Compositio Math. **63** (1987), 271–272.
14. J. E. Cremona, *Modular symbols for  $\Gamma_1(N)$  and elliptic curves with everywhere good reduction*, Math. Proc. Camb. Phil. Soc. **111** (1992), 199–218.
15. J. E. Cremona and E. Whitley, *Periods of cusp forms and elliptic curves over imaginary quadratic fields*, Math. Comp. **62** (1994), 407–429.
16. J. E. Cremona, *The analytic order of III for modular elliptic curves*, J. de Théorie des Nombres de Bordeaux **5** (1993), 179–184.
17. J. E. Cremona, *Computing the degree of the modular parametrization of a modular elliptic curve*, Math. Comp. **64** (1995), 1235–1250.
18. J. E. Cremona, *Computing periods of cusp forms and modular elliptic curves*, Exp. Math. **6:2** (1997), 97–107.
19. J. E. Cremona and P. Serf, *Computing the rank of elliptic curves over real quadratic number fields of class number 1*, University of Exeter Department of Mathematics Preprint **M96/14** (1996).

20. J. E. Cremona, *Classical invariants and 2-descent on elliptic curves*, University of Exeter Department of Mathematics Preprint M96/16 (1996).
21. B. Edixhoven, *On the Manin constants of modular elliptic curves*, Arithmetic Algebraic Geometry, Progress in Mathematics **89**, Birkhauser, 1991, pp. 25–39.
22. G. Faltings, *Endlichkeitssätze für abelsche Varietäten über Zahlkörpern*, Invent. Math. **73** (1983), 349–366.
23. S. Fermigier, *Construction of high rank elliptic curves over  $\mathbb{Q}(T)$  and  $\mathbb{Q}$  with nontrivial 2-torsion*, C. R. Acad. Sc. Paris **322** (1996), 949–952.
24. L. Figueiredo, *Serre's conjecture over imaginary quadratic fields*, PhD thesis, University of Cambridge, 1995.
25. B. H. Gross and D. Zagier, *Points de Heegner et dérivées de fonctions L*, C. R. Acad. Sc. Paris **297** (1983), 85–87.
26. B. H. Gross and D. Zagier, *Heegner points and derivatives of L-series*, Invent. Math. **84** (1986), 225–320.
27. D. Husemöller, *Elliptic curves*, Springer-Verlag, 1987.
28. A. W. Knapp, *Elliptic Curves*, Mathematical Notes **40**, Princeton University Press, 1992.
29. V. I. Kolyvagin, *Finiteness of  $E(\mathbb{Q})$  and  $\text{III}_{E/\mathbb{Q}}$  for a subclass of Weil curves*, Math. USSR Izvest. **32** (1989), 523–542.
30. A. Kraus, *Quelques remarques à propos des invariants  $c_4$ ,  $c_6$  et  $\Delta$  d'une courbe elliptique*, Acta Arith. **54** (1989), 75–80.
31. S. Lang, *Elliptic functions*, Addison-Wesley, 1973.
32. S. Lang, *Introduction to modular forms*, Springer-Verlag, 1976.
33. S. Lang, *Elliptic curves: diophantine analysis*, Springer-Verlag, 1976.
34. M. Laska, *An algorithm for finding a minimal Weierstrass equation for an elliptic curve*, Math. Comp. **38** (1982), 257–260.
35. M. Laska, *Elliptic curves over number fields with prescribed reduction type*, Aspects of Mathematics Vol. E4, Vieweg, 1983.
36. E. Lutz, *Sur l'équation  $y^2 = x^3 - Ax - B$  dans les corps p-adic*, J. Reine Angew. Math. **177** (1937), 237–247.
37. Ju. I. Manin, *Parabolic points and zeta-functions of modular curves*, Math. USSR-Izv. **6** (1972), 19–64.
38. B. Mazur, *Courbes elliptiques et symboles modulaires*, Séminaire Bourbaki No. 414 (1972), 277–294.
39. B. Mazur, *Modular curves and the Eisenstein ideal*, IHES Publ. Math. **47** (1977), 33–186.
40. B. Mazur, *Rational isogenies of prime degree*, Invent. Math. **44** (1978), 129–162.
41. B. Mazur and H. P. F. Swinnerton-Dyer, *Arithmetic of Weil curves*, Invent. Math. **25** (1974), 1–61.
42. L. Merel, *Opérateurs de Hecke pour  $\Gamma_0(N)$  et fractions continues*, Annales de l'Institut Fourier de l'Université de Grenoble **41** no. **3** (1991), 519–537.
43. J.-F. Mestre, *La méthode des graphes. Exemples et applications.*, Proceedings of the International Conference on Class Numbers and Units of Algebraic Number Fields (Y. Yamamoto and H. Yokoi, eds.), Katata, 1986, pp. 217–242.
44. M. R. Murty and V. K. Murty, *Mean values of derivatives of modular L-series*, Ann. Math. **133** (1991), 447–475.

45. K. Nagao, *An example of an elliptic curve over  $\mathbb{Q}$  with rank  $\geq 20$* , Proceedings of the Japan Academy Series A **69** (1993), 291–293.
46. T. Nagell, *Solution de quelque problèmes dans la théorie arithmétique des cubiques planes du premier genre*, Wid. Akad. Skrifter Oslo I (1935).
47. A. Néron, *Modèles minimaux des variétés abéliennes sur les corps locaux et globaux*, IHES Publ. Math. **21** (1964), 361–482.
48. R. G. E. Pinch, *Elliptic curves over number fields*, DPhil thesis, University of Oxford, 1982.
49. R. G. E. Pinch, *Elliptic curves with everywhere good reduction*, (preprint).
50. M. Pohst and H. Zassenhaus, *Algorithmic Algebraic Number Theory*, Encyclopedia of mathematics and its applications, Cambridge University Press, 1989.
51. R. Schoof, *Elliptic curves over finite fields and the computation of square roots mod p*, Math. Comp. **44** (1985), 483–494.
52. P. Serf, *The rank of elliptic curves over real quadratic number fields of class number 1*, PhD thesis, Universität des Saarlandes, Saarbrücken, 1995.
53. J.-P. Serre, *Propriétés galoisiennes des points d'ordre fini des courbes elliptiques*, Invent. Math. **15** (1972), 259–331.
54. J.-P. Serre, *Résumé de cours*, Annuaire du Collège de France, 1984–85.
55. G. Shimura, *Introduction to the arithmetic theory of automorphic functions*, Math. Soc. Japan No. 11, 1971.
56. S. Siksek, *Descent on curves of genus one*, PhD thesis, University of Exeter, 1995.
57. S. Siksek, *Infinite Descent on Elliptic Curves*, Rocky Mountain Journal of Mathematics **25 no. 4** (1995), 1501–1538.
58. J. H. Silverman, *The Arithmetic of Elliptic Curves*, GTM 106, Springer-Verlag, 1986.
59. J. H. Silverman, *Computing heights on elliptic curves*, Math. Comp. **51** (1988), 339–358.
60. J. H. Silverman, *The difference between the Weil height and the canonical height on elliptic curves*, Math. Comp. **55** (1990), 723–743.
61. J. H. Silverman, *Advanced Topics in the Arithmetic of Elliptic Curves*, GTM 151, Springer-Verlag, 1994.
62. J. H. Silverman, *Computing canonical heights with little (or no) factorization*, Math. Comp. **66** (1997), 787–805.
63. N. P. Smart, S. Siksek and J. R. Merriman, *Explicit 4-descents on an elliptic curve*, Acta Arith. **LXXVII.4** (1996), 385–404.
64. H. P. F. Swinnerton Dyer and B. J. Birch, *Elliptic curves and modular functions*, Modular Functions of One Variable IV, Lecture Notes in Mathematics 476, Springer-Verlag, 1975.
65. J. Tate, *Algorithm for determining the singular fiber in an elliptic pencil*, Modular Functions of One Variable IV, Lecture Notes in Mathematics 476, Springer-Verlag, 1975.
66. J. Tate, Letter to J.-P. Serre, Oct. 1, 1979.
67. D. J. Tingley, *Elliptic curves uniformized by modular functions*, DPhil thesis, University of Oxford, 1975.
68. J. Vélu, *Isogénies entre courbes elliptiques*, C. R. Acad. Sc. Paris **273** (1971), 238–241.
69. D. Zagier, *Modular Parametrizations of Elliptic Curves*, Canadian Math. Bull. **28** (1985), 372–384.
70. J. Gebel and H. G. Zimmer, *Computing the Mordell-Weil Group of an Elliptic Curve over  $\mathbb{Q}$* , Elliptic Curves and Related Topics (H. Kisilevsky and M. Ram Murty, eds.), CRM Proceedings and Lecture Notes, vol. 4, 1994, pp. 61–83.