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# Bibliography

- [1] B. J. Birch and H. P. F. Swinnerton-Dyer. The Hasse problem for rational surfaces. *J. Reine Angew. Math.*, 274/275:164–174, 1975.
- [2] F. Bogomolov and Y. Tschinkel. Density of rational points on elliptic K3 surfaces. *Asian J. of Math.*, 4:351–368, 2000.
- [3] Siegfried Bosch, Werner Lütkebohmert, and Michel Raynaud. *Néron Models*. Springer-Verlag, Berlin-Heidelberg, 1990.
- [4] T. D. Browning, L. Matthiesen, and A. N. Skorobogatov. Rational points on pencils of conics and quadrics with many degenerate fibres. Preprint, 2012. <http://arxiv.org/abs/1209.0207>.
- [5] Nils Bruin, Bjorn Poonen, and Michael Stoll. Generalized explicit descent and its application to curves of genus 3. Preprint, 2012. arXiv:1205.4456v1.
- [6] J-L. Colliot-Thélène, J-J. Sansuc, and H. P. F. Swinnerton-Dyer. Intersections of two quadrics and Châtelet surfaces I. *J. reine angew. Math.*, 373:37–107, 1987.
- [7] J-L. Colliot-Thélène, J-J. Sansuc, and H. P. F. Swinnerton-Dyer. Intersections of two quadrics and Châtelet surfaces II. *J. reine angew. Math.*, 374:72–168, 1987.
- [8] Jean-Louis Colliot-Thélène. Surfaces rationnelles fibrées en coniques de degré 4. In *Séminaire de théorie des nombres, Paris 1988-1989*, volume 91 of *Progr. Math.*, pages 43–55. Birkhäuser, 1990.
- [9] Jean-Louis Colliot-Thélène. L'arithmétique des variétés rationnelles. *Ann. Fac. Sci. Toul.*, 54(2):375–492, 1992.

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- [10] E. Fouvry and H. Iwaniec. Primes in arithmetic progressions. *Acta Arith.*, 42(2):197–218, 1983.
- [11] Rajiv Gupta and M. Ram Murty. Cyclicity and generation of points mod  $p$  on elliptic curves. *Invent. Math.*, 101:225–235, 1990.
- [12] Robin Hartshorne. *Algebraic Geometry*. Springer-Verlag, New York, 1977.
- [13] Brendan Hassett. Potential Density of Rational Points on Algebraic Varieties. In *Higher Dimensional Varieties and Rational Points*. Springer, 2003.
- [14] Brendan Hassett, Anthony Várilly-Alvarado, and Patrick Varilly. Transcendental obstructions to weak approximation on general K3 surfaces. *Adv. Math.*, 228:1377–1404, 2011.
- [15] Shinobu Hosono, Bong H. Lian, Keiji Oguiso, and Shing-Tung Yau. Kummer structures on a K3 surface: an old question of T. Shioda. *Duke Math. J.*, 120(3):635–647, 2003.
- [16] V. A. Iskovskikh. Minimal models of rational surfaces over arbitrary fields. *Izv. Akad. Nauk SSSR Ser. Math.*, 43(1):19–43, 237, 1979.
- [17] S. Lang and A. Weil. Number of points of varieties in finite fields. *Amer. J. Math.*, 76:819–827, 1954.
- [18] Adam Logan, David McKinnon, and Ronald van Luijk. Density of rational points on diagonal quartic surfaces. *Algebra and Number Theory*, 4(1):1–20, 2010.
- [19] Yu. I. Manin. Le groupe de Brauer–Grothendieck en géométrie diophantienne. In *Actes Congrès Int. Math. Nice*, volume 1, pages 401–411, 1970.
- [20] Yu. I. Manin. *Cubic Forms: Algebra, Geometry, Arithmetic*. North-Holland Publishing Co., Amsterdam, 2nd edition, 1986.
- [21] Barry Mazur. The Topology of Rational Points. *Experimental Mathematics*, 1(1):35–45, 1992.
- [22] Jean-François Mestre. Rang de courbes elliptiques d’invariant donné. *C. R. Acad. Sci. Paris Sér. I Math.*, 314:919–922, 1992.

- [23] David Mumford. *Abelian varieties*. Oxford University Press, Oxford, 2nd edition, 1974.
- [24] A. Nerode. A decision method for  $p$ -adic integral zeros of diophantine equations. *Bull. Amer. Math. Soc.*, 69:513, 1963.
- [25] Thomas Preu. *Transcendental Brauer–Manin obstruction for a diagonal quartic surface*. PhD thesis, Universität Zürich, 2010.
- [26] Luis Ribes and Pavel Zalesskii. *Profinite Groups*. Springer-Verlag, Berlin-Heidelberg, 2010.
- [27] P. Salberger and A. N. Skorobogatov. Weak approximation for surfaces defined by two quadratic forms. *Duke Math. J.*, 63(2):517–536, 1991.
- [28] Per Salberger. Sur l’arithmétique de certaines surfaces de del Pezzo. *C. R. Acad. Sci. Paris*, 303:273–276, 1986.
- [29] Cecília Salgado, Damiano Testa, and Anthony Várilly-Alvarado. On the unirationality of del Pezzo surfaces of degree two. Preprint, 2013. <http://arxiv.org/abs/1304.6798>.
- [30] Cecília Salgado and Ronald van Luijk. Density of rational points on del Pezzo surfaces of degree one. Preprint, 2012. <http://arxiv.org/abs/1212.2364>.
- [31] Joseph H. Silverman. *Advanced Topics in the Arithmetic of Elliptic Curves*. Springer-Verlag, New York, 1994.
- [32] Joseph H. Silverman. *The Arithmetic of Elliptic Curves, Second Edition*. Springer-Verlag, New York, 2009.
- [33] Alexei Skorobogatov. *Torsors and rational points*. Cambridge University Press, Cambridge, 2001.
- [34] A. N. Skorobogatov and Yu. G. Zarhin. A finiteness theorem for the Brauer group of abelian varieties and K3 surfaces. *J. Alg. Geom.*, 17:481–502, 2008.
- [35] W. A. Stein et al. *Sage Mathematics Software (Version 5.4.1)*. The Sage Development Team, 2013. <http://www.sagemath.org>.
- [36] H. P. F. Swinnerton-Dyer. Two special cubic surfaces. *Mathematika*, 9:54–56, 1962.

- [37] Sir Peter Swinnerton-Dyer. Arithmetic of diagonal quartic surfaces, II. *Proc. London Math. Soc.*, 80(3):513–544, 2000.
- [38] Sir Peter Swinnerton-Dyer. Density of rational points on certain surfaces. 2010. Preprint.
- [39] Doug Ulmer. Explicit points on the Legendre curve. Preprint, 2012. <http://arxiv.org/abs/1002.3313v2>.
- [40] J.F. Voloch. Explicit  $p$ -descent for elliptic curves in characteristic  $p$ . *Compos. Math.*, 74:247–258, 1990.
- [41] Olivier Wittenberg. Transcendental Brauer–Manin obstruction on a pencil of elliptic curves. In B. Poonen et Yu. Tschinkel, editor, *Arithmetic of higher-dimensional varieties*, volume 226 of *Progress in Mathematics*, pages 259–267, 2004.