

Curriculum Vitae

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Career summary.

Professor, Boston University, 1990 – 2013.
Professor, University of Maryland, 1992 – 1994.
Professor, Rutgers University, 1987 – 1990.
Associate Professor, Rutgers University, 1981 – 1987.
Visitor, Mathematical Sciences Research Institute, 1986 – 1987.
Visitor, Institut des Hautes Etudes Scientifiques, 1983 – 1984.
Alfred P. Sloan Fellow, 1982 – 1984.
Assistant Professor, Rutgers University, 1980 – 1981.
Member, Institute for Advanced Study, 1979 – 1980.
Assistant Professor, Harvard University, 1976 – 1979.
Yale University, Ph. D. 1976.
Haverford College, B. A. 1972.

REFERENCES

- [1] *Points at infinity on the Fermat curves*, Invent. Math. 39 (1977), 95 – 127.
- [2] (with B. H. Gross) *Some results on the Mordell-Weil group of the Jacobian of the Fermat curve*, Invent. Math. 44 (1978), 201 – 224.
- [3] *The periods of the Fermat curve*. Appendix to: B. H. Gross, *On the periods of Abelian integrals and a formula of Chowla-Selberg*, Invent. Math. 45 (1978), 193 – 211.
- [4] (with N. Koblitz) *Simple factors in the Jacobian of a Fermat curve*, Can. J. Math. 30 (1978), 1183 – 1205.
- [5] *The non-vanishing of certain Hecke L-functions at the center of the critical strip*, Duke Math. J. 47 (1980), 223 – 232.
- [6] *Galois conjugacy of unramified twists of Hecke characters*, Duke Math. J. 47 (1980), 695 – 703.
- [7] *On the L-functions of canonical Hecke characters of imaginary quadratic fields*, Duke Math. J. 47 (1980), 547 – 557.
- [8] *Root numbers of Hecke L-functions of CM fields*, Amer. J. Math. 104 (1982), 517 – 543.
- [9] *Elliptic curves with good reduction everywhere*, J. London Math. Soc. 25 (1982), 216 – 222.
- [10] *Some remarks on Weierstrass points*. In: *Number Theory Related to Fermat's Last Theorem*, N. Koblitz ed., Progress in Mathematics 26, Birkhäuser (1982), 71 – 78.
- [11] (with H. L. Montgomery) *On the L-functions of canonical Hecke characters of imaginary quadratic fields, II*, Duke Math. J. 49 (1982), 937 – 942.
- [12] *A modular version of Jensen's formula*, Math. Proc. Cambridge Phil. Soc. 95 (1984), 15 – 20.
- [13] *On L-functions of elliptic curves and anticyclotomic towers* Invent. Math. 75 (1984), 383 – 408.
- [14] *On L-functions of elliptic curves and cyclotomic towers*, Invent. Math. 75 (1984), 409 – 423.

- [15] *Courbes elliptiques, fonctions L , et tours cyclotomiques*. In: *Séminaire de Théorie des Nombres de Bordeaux*, Année 1983 – 1984, 14/01 – 14/10.
- [16] Book review: *Lectures on the Theory of Algebraic Numbers*. By Erich Hecke. *Amer. Math. Monthly* 91 (1984), 212–213.
- [17] *Weierstrass points and modular forms*, *Illinois J. Math.* 29 (1985), 134 – 141.
- [18] *Jacobi sums and explicit reciprocity laws*, *Compos. Math.* 60 (1986), 97 – 114.
- [19] *Elliptic Curves and Values of L -functions*. In: *Canadian Math. Soc. Conf. Proc.* 7 (1987), 371 – 387.
- [20] *L -functions and division towers*, *Math. Ann.* 281 (1988), 611 – 632.
- [21] *Nonvanishing of L -functions for $GL(2)$* , *Invent. Math.* 97 (1989), 381 – 403.
- [22] *The vanishing of certain Rankin-Selberg convolutions*. In: *Automorphic Forms and Analytic Number Theory*, CRM Conf. Proc. (1990), 123 – 133.
- [23] *Nonvanishing of L -functions and structure of Mordell-Weil groups*, *J. reine angew. Math.* 417 (1991), 1 – 26.
- [24] *Root numbers of Jacobi-sum Hecke characters*, *Illinois J. Math.* 36 (1992), 155 – 176.
- [25] *Twists of Hecke L -functions*, *Forum Math.* 4 (1992), 625 – 633.
- [26] *Variation of the root number in families of elliptic curves*, *Compos. Math.* 87 (1993), 119–151.
- [27] *Elliptic curves and the Weil-Deligne group*. In: *Elliptic Curves and Related Topics*, HKisilevsky and M. R. Murty, eds, CRM Proceedings and Lecture Notes 4, Amer. Math. Soc. (1994), 125 – 157.
- [28] *Galois theory, elliptic curves, and root numbers*, *Compos. Math.* 100 (1996), 311 – 349.
- [29] *Galois representations in the Tate-Shafarevich group of an elliptic curve*, *Math. Research Letters* 3 (1996), 103 – 107.
- [30] *Realization of Galois representations of low degree in Mordell-Weil groups*, *Math. Research Letters* 4 (1997), 123 – 130.
- [31] *Unboundedness of the Tate-Shafarevich group in families of quadratic twists*. Appendix to: J. Hoffstein and W. Luo, *Nonvanishing of L -series and the combinatorial sieve*, *Math. Research Letters* 4 (1997), 443 – 444.
- [32] *Modular curves, Hecke correspondences, and L -functions*. In: *Modular Forms and Fermat's Last Theorem*, edited by G. Cornell, J. H. Silverman, and G. Stevens, Springer-Verlag (1997), 41 – 100.
- [33] (with J. B. Tunnell) *An elementary case of Serre's conjecture*, *Pacific J. of Math.*, Olga Taussky-Todd memorial issue (1997), 299 – 309.
- [34] *False division towers of elliptic curves*, *J. of Algebra* 229 (2000), 249 – 279.
- [35] *A deformation of the Tate module*, *J. of Algebra* 229 (2000), 280 – 313.
- [36] *Galois representations in Mordell-Weil groups of elliptic curves*, *Cubo: Mat. Educ.* 3 (2001), 149 – 160.
- [37] *Homomorphisms into groups of formal power series*, *Cubo: Mat. Educ.* 3 (2001), 261 – 265.
- [38] *Modular units and the surjectivity of a Galois representation*, *J. Number Theory*, 107 (2004), 8–24.
- [39] *Root numbers of semistable elliptic curves in division towers*, *Math. Research Letters* 13 (2006), 359 – 376.
- [40] *Serge Lang*, *Gazette des Mathématiciens* 108 (2006), 33–34.
- [41] *Lang's work on modular units and on Frobenius distributions*. In: *The mathematical contributions of Serge Lang*, J. Jorgensen and S. G. Krantz, eds., *Notices AMS*, 54 (2007), 485–488.
- [42] *Scarcity and abundance of trivial zeros in division towers*, *J. Algebraic Geometry* 17 (2008), 643–675.
- [43] *Compatible families of elliptic type*, *Acta Arithmetica* 142 (2010), 1–9.
- [44] *Galois invariance of local root numbers*, *Math. Ann.* 351 (2011), 979 – 1003.
- [45] *Root numbers*. In: *Arithmetic of L -functions*, edited by C. Popescu, K. Rubin, and A. Silverberg, IAS/Park City Mathematics Series Volume 18, AMS (2011), 355 – 448.
- [46] *Irreducible spaces of modular units*. In: *Number Theory, Analysis and Geometry: In Memory of Serge Lang*, edited by Dorian Goldfeld, Jay Jorgenson, Peter Jones, Dinakar Ramakrishnan, Kenneth Ribet and John Tate, Springer (2012), 595 – 608.
- [47] *Inductivity of the global root number*, *Acta Arithmetica* 159 (2013), 245 – 256.

- [48] *Self-dual Artin representations*. In: *Automorphic representations and L-functions*, edited by D. Prasad, C. S. Rajan, A. Sankaranarayanan, and J. Sengupta, Tata Institute of Fundamental Research Studies in Mathematics Volume 22 Hindustan Book Agency (2013), 455 – 499.
- [49] *Artin representations of dihedral type*, preprint.