

Robert POLLACK

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EMPLOYMENT

2004–present	Boston University , Assistant Professor
2002–2004	University of Chicago , VIGRE Dickson Instructor
2003–2004	University of Chicago , NSF Postdoctoral Fellow
2001–2002	University of Washington , NSF Postdoctoral Fellow

EDUCATION

June 2001	Harvard University , Ph.D.
June 1997	Harvard University , M.A.
May 1996	Washington University , B.S.

RESEARCH INTERESTS

- ★ p -adic L -functions and Iwasawa Theory
- ★ Elliptic Curves and Modular Forms
- ★ Algebraic Number Theory

PAPERS

- ★ On μ -invariants of anticyclotomic p -adic L -functions of elliptic curves (submitted)
joint with Tom Weston
- ★ A construction of rigid analytic cohomology classes for congruence subgroups of $SL_3(\mathbb{Z})$
to appear in the *Canadian Journal of Mathematics*
joint with David Pollack
- ★ Two p -adic L -functions and the weak Birch and Swinnerton-Dyer conjecture
L-Functions and Galois Representations, London Math Society LNS 320 (2007), 300–332.
joint with Masato Kurihara
- ★ Kida’s formula and congruences of modular forms,
Documenta Mathematica, 2006, Extra volume (in honor of J. Coates)
joint with Tom Weston
- ★ Iwasawa theory of elliptic curves at supersingular primes over number fields
Journal für die Reine und Angewandte Mathematik, 598 (2006), 71–103.
joint with Adrian Iovita
- ★ Variation of Iwasawa invariants in Hida families,
Inventiones Mathematicae, 163 (2006), no. 3, 523–580.
joint with Matthew Emerton and Tom Weston

PAPERS, CONTINUED

- ★ The efficient calculation of Stark-Heegner points via overconvergent modular symbols
Israel Journal of Mathematics, 153 (2006), 319–354.
joint with Henri Darmon
- ★ Critical slope p -adic L -functions (in preparation)
joint with Glenn Stevens
- ★ Overconvergent modular symbols and p -adic L -functions (in preparation)
joint with Glenn Stevens
- ★ Iwasawa invariants of elliptic curves at supersingular primes (in preparation)
joint with Ralph Greenberg and Adrian Iovita
- ★ An algebraic version of a theorem of Kurihara,
Journal of Number Theory, 110 (2005) no. 1, 164–177.
- ★ The main conjecture for CM elliptic curves at supersingular primes,
Annals of Mathematics, (2) 159 (2004), no. 1, 447–464.
joint with Karl Rubin
- ★ On the p -adic L -function of a modular form at a supersingular prime,
Duke Mathematical Journal, 118 (2003) no. 3, 523–558.

CONFERENCES ORGANIZED

June 2005	Ralph Greenberg's 60 th Birthday Conference, Boston University
Oct 2004	Midwest Number Theory Conference, University of Chicago

GRANTS AND AWARDS

2007–2010	NSF grant DMS-0701153 Overconvergent cohomology of higher rank groups
2006–2007	Sloan Research Fellowship
2004–2007	NSF grant DMS-0439264 (joint with Tom Weston) p -adic variation of supersingular Iwasawa invariants
2005	NSF conference grant DMS-0509836 Open questions and recent developments in Iwasawa theory
2001–2004	NSF postdoctoral fellowship DMS-0102036 p -adic L -series of modular forms at supersingular primes

SELECTED CONFERENCE TALKS

August 2007	Summer School on Iwasawa Theory, McMaster, Canada
July 2006	p -adic Modular Forms and Applications, Luminy, France
Aug 2005	Cryptography and Related Math, Tokyo, Japan
July 2004	Iwasawa 2004, Besançon, France

TEACHING

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| Graduate students | <ul style="list-style-type: none">· Topics in Number Theory (844), Boston University, Spring 2007· Graduate Algebra (741,742), Boston University, 2005–2006 |
| Undergraduates | <ul style="list-style-type: none">· Algebra II (542), Boston University, Spring 2006· Calculus I (123), Boston University, Fall 2005· Linear Algebra (242), Boston University, 2004–2005· Number Theory (341), Boston University, Spring 2005· Real Analysis (203, 204, 205), University of Chicago, 2002–2003 |
| Teachers | <ul style="list-style-type: none">· SESAME for teachers, University of Chicago, Spring 2004· Ross Program for Teachers, Ohio State University, Summer 2005 |
| High school students | <ul style="list-style-type: none">· Summer Institute of Math, Univ. of Washington, Summers 03–05· PROMYS program, Boston University, Summer 2005· Ross program, Ohio State University, Summer 2004 |

REFERENCES

- ★ Henri Darmon, McGill University, darmon@math.mcgill.ca
- ★ Ralph Greenberg, University of Washington, greenber@math.washington.edu
- ★ Barry Mazur, Harvard University, mazur@math.harvard.edu
- ★ Glenn Stevens, Boston University, ghs@math.bu.edu