

CURRICULUM VITAE

Jeremy T. Teitelbaum
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EDUCATION

Ph.D. in Mathematics, Harvard University, 1986.
Thesis Advisor: John Tate.
B.A. in Mathematics *summa cum laude*, Carleton College, 1981.

EMPLOYMENT

University of Illinois at Chicago:
Sr. Associate Dean of the College, 2007–present.
Liberal Arts and Sciences

Sr. Associate Dean, 2006–2007.
Liberal Arts and Sciences
(Natural Sciences, Budget)

Associate Dean, 2004–2006.
Liberal Arts and Sciences
(Natural Sciences, Facilities, Academic Programs)

Professor, 1997–present.
Associate Professor, 1992–1997.
Assistant Professor, 1990–1992.

University of Michigan: T. H. Hildebrandt Research Assistant Professor, 1986–1990

PRINCIPAL ADMINISTRATIVE ACCOMPLISHMENTS

Maintained a close and productive working relationship between the Office of the Dean and departments throughout the college. Negotiated salary offers for new faculty; negotiated counteroffers; negotiated startup packages for new faculty; and reviewed and acted efficiently upon a steady stream of requests for matching funds and special funding. Worked with department heads to help resolve problems with departmental staff through reorganization, salary adjustments, or reclassification.

Worked closely with the Dean and college financial staff to set hiring priorities. Participated in discussions surrounding promotion and tenure cases for all departments in the college.

In collaboration with college financial staff, increased financial accountability of department operations through regular review of department budgets and closer monitoring of soft money expenditures. Revived process of annual budget meetings with department heads and systematic reconciliation of departmental expenditures.

Led a team effort to create the Mathematical Sciences Learning Center, including procuring space, raising internal funds for renovation, organizing programs, and hiring a director.

Developed a plan for differential tuition for science majors in consultation with science heads, campus financial staff, and the Dean. This proposal was approved by the Board of Trustees and took effect in Fall of 2007.

In consultation with the science faculty, developed a plan to recover costs by charging PI's for use of research facilities including Animal Care, Electronics Shops, Machine Shops and Electron Microscope services. The plan attempts to balance the college's need to generate additional revenue with a desire to have the smallest possible impact on research productivity. The plan takes effect in Fall of 2007.

Organized annual “Diversity Roundtable” discussions for college search committees to educate faculty about implicit bias in hiring and to challenge departments to increase representation of minorities and (where appropriate) women.

Secured additional laboratory space for Biological Sciences, Physics and Earth Sciences departments through negotiations in campus space committees.

As Co-PI of NSF STEP Grant, organized and supervised an annual five-week summer enrichment program in mathematics for new UIC students with interests in STEM fields.

Worked closely with the Vice Provost for Undergraduate Affairs to manage availability of key service courses provided by the college to the university.

VISITING APPOINTMENTS

University of Paris VII (Jussieu), July, 2008.

Hangzhou-Beijing International Summer School, Hangzhou, China, August 2004.

Mathematical Sciences Research Institute (MSRI), September, 2001.

Hebrew University, Jerusalem, Israel, Forcheimer Visiting Professor, Feb-Jun 2000.

ATT Bell Laboratories, New Jersey, Consultant, 18-25 July 1995.

Hebrew University, Jerusalem, Israel, Visiting Postdoctoral Fellow, May 1995.

Hebrew University, Jerusalem, Israel, January–March 1993.

Mathematics Institute, University of Cologne, Germany, December 1992.

Math. Sciences Research Institute (MSRI), May, 1986.

AWARDS AND HONORS

Invited hour speaker, Central Section AMS meeting, March, 1995.

Sloan Research Fellow, 1991–1993.

National Science Foundation Postdoctoral Fellow, 1987–1990.

Sloan Doctoral Fellow, 1985–1986.

National Science Foundation Graduate Fellow, 1981–1984.

THESES SUPERVISED

A blowing-up algorithm for computing rings of algebraic integers, by Sarah Hutcheson Jahn, July, 2005.

Computations on Elliptic Curves over Function Fields, by Doug Burke, May, 1995.

UNDERGRADUATE RESEARCH PROJECTS

Ani Gangopadhyaya, p -adic numbers; Nina Patel, Data Compression; Bill Garcia, The Distribution of Prime Numbers

GRANT SUPPORT

Co-PI, Assuring Stem Credential Expansion Through Nurturing Diversity (ASCEND), NSF STEP grant, \$2M/5 years. This program is intended to increase the number of degrees awarded in STEM disciplines, particularly to members of underrepresented groups.

Individual support by NSA Math. Sciences Program 1998–2003.

Individual support by NSF 1990–1998, 2003–present

Consultant to SESAME Project (NSF Funded), 2001-2003.

Member of BC Case Studies Project (FIPSE, Dept. of Education funded), 1999-2001.

Co-Principal Investigator for 80K SCREMS grant for purchase of computer equipment (1998).

Principal Investigator for 28K SCREMS grant for purchase of computer equipment (1993).

UNIVERSITY SERVICE

Treasurer, UIC Chapter of Phi Beta Kappa, 2007–present.
President, UIC Chapter of Phi Beta Kappa, 2006–2007.
Member, Search Committee for University of Illinois Vice President for Academic Affairs, 2007.
Member, LAS Executive Committee, 2003–2004.
Member, Graduate College Awards Committee, 2000–2003.
Fellow of the Honors College, 1994–present.

DEPARTMENT SERVICE

Committee on revision of major in mathematics, 2003.
Director of Graduate Studies, 2000–2002.
Admissions Committee, 2003–2005
Departmental Advisory Committee, 1991–1994, 2003–2005.
Chair, Graduate Admissions Committee, 1997–1999
Masters Exam, Number Theory, 1991–present
Undergraduate Studies Committee, 1993–1994.
Faculty Search Committee, 1995–1996.
Salary Committee, 1995–1996.
Fund Drive Chairman, Math Dept., UIC, 1990–1992.

PROFESSIONAL ACTIVITIES (Mathematics Education)

Co-organizer with Sol Friedberg, Sandy Hauk, Rebecca McGraw, and Kay Merseth, “Using Cases to Develop Knowledge for Teaching Mathematics”, workshop at the Institute for Mathematics and Education, February, 2008.
Participant, “Making Connections” project, University of Arizona Institute for Mathematics and Education, with Alison Castro and Mona Teitelbaum, June, 2007.
Participant, “The Mathematician’s Corner” essay writing project, Mount Holyoke College, December, 2006.
Co-leader (with D. Miltner), Teacher Leader Institute, 10-day professional development program for Chicago Public Schools, July 2006 and continuing in Spring of 2007.
Faculty Member, UIC/U of Chicago/Loyola Endorsement program for middle school teachers. Taught evening course for in-service teachers Fall 2005, Fall 2006.
Discussion Leader (Proof in the Major), Mathematicians for Education Reform network meeting on Excellence in Undergraduate education, Loras College, Dubuque, Iowa, March, 2004.
Participant, Center for Proficiency in the Teaching of Mathematics Summer Institute, Ypsilanti, Michigan, June 2004.
Faculty Member, SESAME Seminars for Middle School Teachers, University of Chicago, 2001–2003.
Member, BC-CASE Project on case studies for TA preparation, 1998–2001.

PROFESSIONAL ACTIVITIES (Mathematics)

Co-organizer, with Izzet Coskun, Alina Cojocaru, and Ramin Takloo-Bighash, of Midwest Algebraic Number Theory Days, UIC, March 7–8, 2008.
Member, Committee on Young Scholars Programs, American Mathematical Society, 2007–present.
External Reviewer, Arizona Winter School on Computational Number Theory, March, 2006.
Organizer, Midwest Algebraic Number Theory Day, UIC, May 10, 2003.
Co-organizer (with P. Schneider), Workshop on continuous representations of p -adic groups, Muenster, Germany, October 2000.
Member, external review committee, Carleton College Mathematics Department, December 1999.
Co-organizer (with Y. Tschinkel), Special Session on Number Theory, Central Section AMS Meeting, September 1998.
Co-organizer (with D. Buell), Computational Perspectives on Number Theory: A Conference in honor of A. O. L. Atkin, UIC, 1995.
Member of Review Panel for NSF Postdoctoral Fellowships, 1997–1999, 2003.

Referee:

American Journal of Mathematics
American Mathematical Monthly
Annales de L'Institut Fourier de Grenoble
Annales de l'Ecole Normale Supérieur
Bulletin of the French Mathematical Society
Compositio Mathematicae
Duke Mathematical Journal
Inventiones Mathematicae
International Mathematics Research Notices
Journal of the American Mathematical Society
Journal of Number Theory
Journal of Symbolic Computation
Mathematics of Computation
Publications Mathématiques des I.H.E.S.
Proceedings of the A.M.S.
Transactions of the A.M.S.
N.S.F. Proposals (individually and on panels)
N.S.A. Mathematical Sciences Proposals
Various promotion cases.

INVITED LECTURES AT PROFESSIONAL MEETINGS

Summer School on Représentations p -adiques des groupes p -adiques, Institut de Mathématiques de Jussieu, lecture series with J. F. Dat, 7-12 July 2008 (in preparation).
Summer School on Serre's Conjecture, Luminy, France, July 2007 (participant only).
Algebraic Number Theory meeting, Oberwolfach, Germany, June 2007 (participant only).
Arizona Winter School on p -adic geometry, Tucson, Arizona, March 2007 (5 lectures).
Center for Proficiency in Teaching of Mathematics, January, 2007 (participant, poster session).
Eigenvarieties Workshop, Harvard, Cambridge, MA, May 2006. (2 lectures).
Special Session on Geometric Representation Theory, AMS Central Section Meeting, South Bend, April, 2006.
AIM workshop on modularity, Palo Alto, March, 2006 (participant only).
Workshop on p -adic Langlands Theory, CRM, Montreal, Canada, September 2005.
Algebraic Number Theory meeting, Oberwolfach, Germany, July 2005 (participant only)
Iwasawa Theory, Conference in Honor of Ralph Greenberg, Boston, June, 2005.
Hangzhou-Beijing International Summer School on p -adic Arithmetic Geometry, Hangzhou, China, August, 2004 (10 lectures, jointly with Peter Schneider).
 p -adic arithmetic geometry, Banff, Canada, August, 2003.
Algebraic Number Theory meeting, Oberwolfach, Germany, July 2003.
 p -adic representation theory, Luminy, France, June 2003.
Workshop on Shimura Varieties and related topics, Fields Institute, Toronto, Canada, March 2002.
Integral Geometry, MSRI, Berkeley, September, 2001
Algebraic Number Theory Meeting, Oberwolfach, Germany, July, 2001
Continuous Representations of p -adic Groups, Muenster, Germany, November 2000.
Israel Mathematical Union Session on Number Theory, Haifa, May 2000.
Special Session on Number Theory, Providence, October 1999.
Special Session on Number Theory, Chicago, September, 1998.
National Council of Teachers of Mathematics National Meeting, Washington, D.C., April, 1998.
Landau Institute Conference on Automorphic Forms, Jerusalem, Israel, February, 1998.
Conference on p -adic methods in Arithmetic Algebraic Geometry, Paris, France, June 1997.
Computational Commutative Algebra and Algebraic Geometry, Schloss Dagstuhl, Germany, May 1997.
Buildings, Oberwolfach, April 1996.
Midwest Algebraic Number Theory Day, Ann Arbor, December 1995.

Special Session on Arithmetic Geometry, Joint AMS-IMA Meeting, Jerusalem, Israel, May, 1995.
International Congress on p -adic Theories, Toulouse, France, July 1994.
Koln-Munster-Wuppertal-Bielefeld workshop on p -adic analysis, Bielefeld, Germany, December 1992.
 p -adic Analysis, Oberwolfach, Germany, February 1992.
Workshop on p -adic Monodromy and the Birch and Swinnerton-Dyer Conjecture, August, 1991.
Computational Number Theory, Oberwolfach, Germany, July 1991.
Arithmetic of Function Fields, Ohio State University, June 1991.
Special Session on Arithmetic Geometry, AMS Meeting, San Francisco, January 1991.
Workshop on Number Theory and Algorithms, MSRI, March 1990.
Int'l Symposium on Symbolic and Algebraic Computation, Rome, July 1988.

COLLOQUIA AND SEMINARS

University of Muenster, Seminar, January 2005.
University of Arizona, Colloquium and Seminar, October 2004.
University of Notre Dame, Colloquium and Seminar, September, 2004.
University of Wisconsin Number Theory Seminar, October, 2003.
Princeton University Number Theory Seminar, April 2002.
University of Chicago Algebraic Geometry Seminar, March 2002.
University of Illinois-Urbana Number Theory Seminar, March, 2001.
Ohio State University Colloquium, February, 2001.
University of Michigan Number Theory Seminar, February, 2001.
University of Maryland Number Theory Seminar, November, 2000.
Ohio State Number Theory Seminar, Columbus, September, 2000
Hebrew University Mathematics Colloquium, Jerusalem, May, 2000.
Ben-Gurion University Mathematics Colloquium, Beersheva, April, 2000.
Ohio State Representation Theory/Number Theory Seminar, Columbus, January 1999.
University of Missouri at St. Louis, St. Louis, October, 1998
University of Muenster, Muenster, Germany, December 1997.
Boston University, December, 1997.
University of Arizona at Tucson, November, 1997.
University of Muenster, Muenster, Germany, December 1996.
University of Arizona at Tucson, January, 1995.
Boston University, March, 1994.
Illinois Institute of Technology, November, 1993.
Boston University, November, 1993.
University of Colorado at Boulder, October 1993.
Hebrew University, Jerusalem, Israel, March 1993.
Weizmann Institute, Rehovot, Israel, February 1993.
Hebrew University, Jerusalem, Israel, January 1993.
University of Saarbruecken, Saarbruecken, Germany, December 1992.
University of California at Berkeley, October, 1992.
University of Minnesota, May 1992.
University of Colorado at Boulder, March 1992.
Cornell University, March 1992.
University of Illinois at Urbana, September, 1990.
Ohio State University, June 1990.
Duke University, February 1990.
University of Washington, January, 1990.
Ohio State University, January 1990.
Boston University, December, 1988.
University of California at Berkeley, October, 1988.
Harvard, May, 1988.
Technion (Haifa, Israel), December, 1987.

MSRI, May, 1986.

COMMUNITY SERVICE

Appeared on WBEZ (91.5FM) "Studio A" program to discuss Wiles's proof of Fermat's Last Theorem, October 1993.

Co-leader of a Family Math program at Lincoln Elementary School in Oak Park, IL, 1992-1993.

CONSULTING ACTIVITY

Author of Cryptographic hash function software for Coolsavings.com (www.coolsavings.com), Spring 1999.

Served as consultant to Coolsavings.com (www.coolsavings.com) on webserver performance and monitoring, Summer 1998.

Served as consultant to variety of technology training companies including Productivity Point, Net Guru Technologies, the IT Academy, and Prosofttraining.com. 1993-2002.

Provided training in C Programming, System Administration, TCP/IP Networking, and other topics to clients including Inland Steel, Commonwealth Edison, Chicago Board of Trade, Motorola, Anderson Consulting, and Platinum Technologies. 1993-2002.

Research Publications

- (with Samit DasGupta) Lectures on the p -adic Upper Half Plane, *to appear*.
- (with P. Schneider) Banach-Hecke algebras and p -adic Galois Representations, *Documenta Math.*, Coates Festschrift Volume, pp. 631-684, 2006.
- (with P. Schneider) Duality for admissible locally analytic representations. *Representation Theory*, **9**:297–326, 2005.
- (with P. Schneider) Algebras of p -adic distributions and admissible representations, *Invent. Math.*, **153**:145–196, 2003.
- (with P. Schneider) p -adic Boundary Values, in Cohomologies p -adiques et applications arithmétiques I, *Astérisque*, **278**:51-125, 2002.
- (with P. Schneider) Banach space representations and Iwasawa theory, *Israel J. Math.*, **127**:359–380, 2002.
- (with P. Schneider) Locally analytic distributions and p -adic representation theory, with applications to GL_2 . *J. Amer. Math. Soc.*, **15**(2):443-468, 2002
- (with P. Schneider) $U(g)$ -finite locally analytic representations, *Representation Theory*, **5**:111-128, 2001. With an appendix by Dipendra Prasad.
- (with P. Schneider) p -adic Fourier Theory, *Doc. Math.* **6**:447-481, 2001.
- Euclid's algorithm and the Lanczos method over finite fields, *Math. Comp.*, **67**(224):1665-1678, 1998.
- (with R. Coleman and G. Stevens) Numerical experiments with p -adic modular forms, pp. 143-158 in Computational Perspectives on Number Theory, Proceedings of a Conference in Honor of A.O.L. Atkin, edited by D. Buell and J. Teitelbaum, American Mathematical Society-International Press Studies in Advanced Mathematics, Volume 7, 1997.
- (with P. Schneider) An integral transform for p -adic symmetric spaces, *Duke Mathematical Journal*, **86**:391–433, 1997.
- The geometry of p -adic symmetric spaces, *Notices of the AMS*, **42**(10):1120-1126, 1995
- (with R. Coleman) Numerical Solution of a p -adic hypergeometric equation, in P -adic Monodromy and the Birch and Swinnerton–Dyer conjecture, edited by B. Mazur and G. Stevens, Contemporary Mathematics, Volume 165, American Mathematical Society, 1994.
- (with A. Libgober) Lines on Calabi–Yau complete intersections, mirror symmetry, and Picard–Fuchs equations, *Duke International Mathematics Research Notices*, **1**:29–39, 1993.
- Modular representations of $PGL_2(K)$ and automorphic forms for Shimura curves, *Inventiones Mathematicae*, **113**:561–580, 1993.
- Rigid Analytic Modular Forms: An Integral Transform Approach, in The Arithmetic of Function Fields, edited by D. Goss, D. R. Hayes, and M. I. Rosen. deGruyter Press, Berlin, 1992.
- Modular Symbols for $\mathbf{F}_q(T)$, *Duke Mathematical Journal*, **68**:271-295, 1992.
- The Poisson kernel for Drinfeld modular curves, *Journal of the American Mathematical Society*, **4**:491–511, 1991.
- Values of p -adic L -functions and a p -adic Poisson Kernel, *Invent. Math.*, **101**:395–410, 1990.
- Rigid geometry of an étale covering of the p -adic upper half plane, *Ann. Inst. Fourier (Grenoble)*, **40**:69–78, 1990.
- The computational complexity of the resolution of plane curve singularities,(extended abstract), Symbolic and Algebraic Computation, Springer Lecture Notes in Computer Science 358, (P. Gianni, ed.), Springer–Verlag, New York, 1989.
- On the computational complexity of the resolution of plane curve singularities, *Math. Comp.*, **54**:797–837, 1990.
- On Drinfeld's universal formal group over the p -adic upper half plane, *Math. Ann.*, **284**:647-674, 1989.
- p -adic periods of genus two Mumford–Schottky curves, *J. Reine Angew. Math.*, **385**:117–151, 1988.

(with B. Mazur and J. Tate) On p -adic analogues of the conjecture of Birch and Swinnerton–Dyer, *Invent. Math.*, **84**:1–48, 1986.

p -adic Periods as Moduli for Mumford–Schottky Curves of Genus Two, Ph.D. thesis, Harvard University, 1986. Advisor: John Tate.

Editorships

(with D. Buell) Computational Perspectives on Number Theory, Proceedings of a conference in honor of A.O.L. Atkin, American Mathematical Society–International Press Studies in Advanced Mathematics, Volume 7, 1997.

Reviews

Featured review of “Integration on $\mathcal{H}_p \times \mathcal{H}$ and arithmetic applications” by H. Darmon, MR1884617 (2003j:11067).

Review of “Prime Numbers: A Computational Perspective” by Crandall and Pomerance, *Bull. Amer. Math. Soc. (N.S.)*, 39:449–454, 2002.

Review of “Fourier Analysis on Number Fields” by Ramakrishna and Valenza, *Bull. Amer. Math. Soc. (N.S.)*, 37:373–377, 2000

Featured review of “Basic Structures of Function Field Arithmetic” by D. Goss, MR1423131 (97i:11062).

Books and Monographs

Number Theory and the Foundations of Arithmetic, a course for middle-grade teachers, DRAFT.

(with Sol Friedberg and the BC Case Project), Teaching mathematics in colleges and universities: case studies for today’s classroom. AMS-MAA, Providence, 2001. ISBN 0-8218-2875-4.

(with U. Pabrai, V. Gurbani, S. Gregory, and G. King) Webmaster Administrator Certification Exam Guide, McGraw-Hill, New York, 1997.

Linux Fundamentals, Prosoft I-Net Solutions, 1999. ISBN: 1-5814-3097-3.

Linux System and Network Administration, Prosoft I-Net Solutions, 1999. ISBN: 1-5814-3102-3.

UNIX Fundamentals, Prosoft I-Net Solutions, 1999. ISBN: 1-5814-3095-7.

UNIX System and Network Administration, Prosoft I-Net Solutions, 1999. ISBN 1-5814-3100-7.

Other Publications

“Playground Secrets of Higher Mathematics,” essay for “The Mathematician’s Corner.” *To appear.*

Codes and Ciphers, Worldbook Encyclopedia Entry, 2003 edition.

Encryption, Worldbook Encyclopedia Entry, Online edition.