

Department of Mathematics
University of Rochester
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Nationality: US Citizen

Research Interests

- Arithmetic Dynamics (especially number theoretic questions arising from iterations of rational functions)
- Algebraic Geometry
- Algebraic Number Theory
- Diophantine Geometry

Education

University of Rochester, Rochester, NY, USA
PhD. Mathematics, October 2009
M.A. Mathematics, May 2002
B.A. Mathematics, May 2001

Teaching

MATHEMATICS INSTRUCTOR University of Rochester
Rochester, NY, USA Fall 2006 - Spring 2009
Taught five semesters of calculus (math 161, 141, 142, and 143) and two summer sessions of linear algebra with differential equations (math 165).

TEACHING ASSISTANT University of Rochester
Rochester, NY, USA Fall 2004 - Spring 2006
Have been a teaching assistant for various mathematics courses including calculus (math 161, 162), honors calculus (math 171) and linear algebra with differential equations (math 165).

MATHEMATICS INSTRUCTOR John Jay College & Baruch College, CUNY
New York, NY, USA Fall 2003 - Spring 2004
Taught algebra (math 100, 104 and 105) at John Jay College, and pre-calculus (math 2001) and algebra (math 1030) at Baruch College .

MATHEMATICS INSTRUCTOR University of Rochester, Office of Minority Affairs
New York, NY, USA Summer 2002
Designed and taught a calculus course for the Early Connection Opportunity (ECO) program to prepare incoming students from diverse backgrounds for college level mathematics.

Talks & Presentations

- *The Exotic World of p -Adic Numbers.* Mathematics Colloquim, SUNY Geneseo, Geneseo, NY. April 2009
- *Polynomial Orbits Modulo p .* Number Theory Seminar, University of Rochester, Rochester, NY. November 2008
- *The Exotic World of p -Adic Numbers.* Society of Undergraduate Math Students Presentation, University of Rochester, Rochester, NY. April 2008.
- *Integer Points in Backward Orbits.* Special Session in Algebraic Dynamics, American Mathematical Society Meetings, San Diego, CA. Spring 2008.

- *Integer Points in Backward Orbits*. Number Theory Seminar, University of Rochester, Rochester, NY. Fall 2007
- *Zeta Functions and the Riemann-Roch Problem*. Number Theory Seminar, University of Rochester, Rochester, NY. Spring 2007.
- *Unique Factorization and Diophantine Equations*. Society of Undergraduate Math Students Presentation, University of Rochester, Rochester, NY. December 2004.

Workshops & Conferences Attended

- *Mini-workshop in p-adic Dynamics*, Fields Institute, Toronto ON, October 27 - 28 2008.
- *Special Functions and Transcendence*, Arizona Winter School, University of Arizona, Tucson AZ, March 15 - 19 2008.
- *The uniform boundedness conjecture in arithmetic dynamics*, American Institute of Mathematics, San Francisco CA, January 14 - 18 2008.
- *Summer School in Iwasawa Theory*, Fields Institute, McMaster University, Hamilton, ON Canada, August 9 - 13 2007.
- *p-adic Geometry*, Arizona Winter School, University of Arizona, Tucson AZ, March 10 - 14 2007.
- *Excursions in Computational Number Theory*, MSRI Summer Program, Simon Fraser University, Vancouver, BC Canada, June 17 - 28 2002.
- *Advances in Number Theory and Random Matrix Theory*, University of Rochester, Rochester NY, May 30 - June 8 2006.
- *Computing the Continuous Discretely*, MSRI Summer Program, BIRS, Banff, AB Canada, August 6 - 20 2005.
- *Excursions in Computational Number Theory*, MSRI Summer Program, Simon Fraser University, Vancouver, BC Canada, June 17 - 28 2002.

Publications & Preprints

- *Integer Points in Backward Orbits*. Submitted: Journal of Number Theory. Preprint available at <http://arxiv.org/abs/0808.2679>

Awards & Distinctions

- Dean's Teaching Fellowships, University of Rochester, Fall 2006, Spring 2007, Fall 2007, Fall 2008, Spring 2009.
- Teaching Assistantship, University of Rochester, 2003 - present.
- Graduated with High Distinction from the Mathematics Department, University of Rochester, May 2001.
- Bausch & Lomb Scholarship, University of Rochester 1997 - 2001

References

- THOMAS J. TUCKER (Adviser)
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- JONATHAN PAKIANATHAN (Teaching Reference)
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- MICHAEL ZIEVE
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