Curriculum Vitae: Martin H. Weissman

CONTACT INFORMATION

Assistant Professor
Department of Mathematics
UC Santa Cruz
361 B Baskin Engineering

Voice: (617)501-3591
E-mail: weissman@ucsc.edu
WWW: http://people.ucsc.edu/~weissman
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EMPLOYMENT

Full-time Positions

University of California, Santa Cruz **July, 2006 - Present**

Assistant Professor of Mathematics.

University of California, Berkeley **August, 2003 - June, 2006**

Postdoctoral Fellow in Mathematics.

Visiting Research

Max Planck Institute for Mathematics **January - February, 2010**

Visiting Scholar in Mathematics. (Invitation received, Summer 2009)

University of Michigan **January - March, 2009**

Visiting Scholar in Mathematics.

University of Michigan **January - March, 2008**

Visiting Scholar in Mathematics.

Hausdorff Institute, Bonn, Germany **June - July, 2007**

Visiting Scholar in Mathematics.

University of Michigan **January - March, 2007**

Visiting Scholar in Mathematics.

EDUCATION

Harvard University **August, 1999 - June, 2003**

Ph.D., Mathematics.
Advisor: Benedict H. Gross.
Thesis: The Fourier-Jacobi Map and Small Representations

Princeton University **August, 1995 - June, 1999**

A.B., Mathematics, *summa cum laude*.

Professional competence and activity

Nominated for Excellence in Teaching Award — **Academic year 2008-9**
(26 out of 750 eligible UCSC faculty nominated.)

Course Development Fellowship, UC Santa Cruz — **Summer, 2008**

Course Development Fellowship, UC Santa Cruz — **Winter quarter, 2007**

Member, American Mathematical Society — **2006 – Present**

National Science Foundation Postdoctoral Fellowship — **Fall 2003 – Spring 2006**

Clay Mathematics Institute Liftoff Fellowship — **Summer 2003**

National Science Foundation Graduate Research Fellowship — **Fall 1999 – Spring 2002**

Distinction in Teaching Award, Harvard University — **Spring 2000**

ΦBK, Princeton University — **June 1999**

Greenberg Prize in mathematics, Princeton University — **June 1999**

Writings in Progress

M.H. Weissman and G. Savin. — **2009**
Dichotomy for generic supercuspidal representations of G_2
Submitted, September 2009.

Published Writings

M.H. Weissman and T.K. Howard. — **2009**
Depth-Zero Representations of Nonlinear Covers of p-Adic Groups
International Mathematics Research Notices. Accepted May 8, 2009. 17 pages.

M.H. Weissman. — **2009**
Metaplectic Tori over Local Fields
Pacific Journal of Mathematics **241** (2009), No. 1. 169 – 200.

M.H. Weissman. — **2008**
Multiplying Modular Forms
Chapter 16, pp. 311 – 342,
In "Modular Forms on Schiermonnikoog".
Edited by Bas Edixhoven, Gerard van der Geer, and Ben Moonen.
Published by Cambridge University Press. December, 2008.

M.H. Weissman. — **2006**
D_4 Modular Forms
American Journal of Mathematics **128** (2006), No. 4, 849-898.

M.H. Weissman. — **2003**
The Fourier-Jacobi Map and Small Representations
Represent. Theory **7** (2003), 259–274.

University Service

Undergraduate Vice Chair — **April, 2009 – present**

Hiring Committee — **September, 2007 – March, 2008**

Monterey Bay Area Mathematics Project — **Spring, 2007 - present**

UC Office of the President sponsored program for K-12 Teacher education.
Workshop presenter and PI since 2008.

Outside Professional Activities

Invited Lectures

Featured Lectures

"A users guide to metaplectic groups". **January 2010**
Joint Meetings of the AMS and MAA, San Francisco.
Special Session on Harmonic Analysis and Representations of Reductive p-adic Groups.

"Octonions, cubes, and embeddings". **February 2009**
SAGE days 13, University of Georgia.

"A well-rounded discussion of spheres." **January 2009**
Undergraduate Math Club, University of Michigan.

"Multiplying Modular Forms" **January 2007**
Joint Meetings of the AMS and MAA, New Orleans.
Special Session on Arithmetic Geometry.

"Arithmetic Embedding Problems" **March 2006**
University of Utah. Departmental Colloquium.

Dichotomy for G_2

AMS Southeastern Meeting, Boca Raton, Florida. **October 2009**
Special Session on Modular Forms and Automorphic Forms.

University of Michigan, Group, Lie, and Number Theory Seminar. **September, 2009**

Stanford University, Number Theory Seminar. **April 2009**

University of California, Los Angeles, Number Theory Seminar. **February 2009**

University of Windsor, Ontario, Algebra Seminar. **February 2009**

Metaplectic Tori

University of Michigan, Group, Lie, and Number Theory Seminar. **September 2008**

University of Utah, Representation Theory Seminar. **April 2008**

University of Maryland, Representation Theory Seminar. **March 2008**

University of California, Santa Cruz, Algebra Seminar. **October 2007**

University of California, Berkeley, Automorphic Forms Seminar. **October 2007**

Multiplying Modular Forms

Hausdorff Institute for Mathematics, Representation theory seminar. **July, 2007**

University of California, Santa Barbara, Representation theory conference. **April, 2007**

University of Michigan, Lie Theory Seminar. **March 2007**

Stanford University, Representation Theory Seminar **November 2006**

Paley-Wiener Theorems and Local L-functions

University of California, Berkeley, Number theory seminar. **November 2005**

University of Michigan, Midwest representation theory conference. **October 2005**

University of California, Berkeley, Number theory seminar. **May 2005**

D_4 Modular Forms

University of Minnesota. Automorphic forms seminar. **November 2004**

University of California, Los Angeles, Number theory seminar. **Fall 2004**

Harvard University, Number theory seminar. **April 2004**

University of Michigan, Ann Arbor, Groups and geometry seminar. **March 2004**

University of California, Santa Barbara. Workshop on automorphic forms. **March 2004**

Stanford University, Number theory seminar. **February 2004**

California Institute of Technology, Number theory seminar. **January 2004**

University of California, Berkeley, Number theory seminar. **November 2003**

University of California, San Diego, Representation theory seminar. **November 2003**

The Fourier-Jacobi Map and Small Representations

Harvard University number theory seminar. **Spring 2003**

M.I.T. Lie groups and representation theory seminar. **November 2002**

University of Michigan and Michigan State joint arithmetic seminar. **October 2002**

Banff workshop on automorphic forms and representations of p-adic groups. **December 2001**

Journal Service

Reviewer, Zentralblatt Mathematics Reviews. **Winter 2009 – present**

Referee, Journal of the Ramanujan Mathematical Society **2009**

Referee, Annales de la Faculte de Toulouse **2008**

Referee, The Michigan Mathematical Journal **2007**

Mathematics Education

Participant, AIM Workshop on math teacher circles **Summer, 2009**

Instructor, Michigan Math and Science Scholars (high school) program. **Summer, 2008**

Presenter, Alliance for Science and MBAMP **Spring 2007**

TEACHING

Postdoctoral mentoring

Mentor, NSF Postdoctoral Fellow **Fall, 2009 - Present**

Supervising Scott Crofts in his NSF Postdoctoral Fellowship.
He will be present at UCSC for two years, 2009-11.

Graduate student supervision

Ph.D. students **Fall, 2008 – present**

Supervising Frederick Nitz in doctoral research.
Prelim exams passed.
Oral exams expected Fall, 2009.
Researching a mixed-characteristic analogue of the affine Grassmannian.
Supervising Chris Shelley in research.
One prelim exam remaining for Fall, 2009.
Researching Coxeter groups, incidence geometry, and arithmetic.

Masters student **Fall, 2008**

Supervised the masters thesis of Megan Appold-Peterschmidt.
She received her Master's degree from UCSC in Spring, 2009.
Thesis topic: Solvable quintic equations.

Masters student **Summer 2006 - Spring 2007**

Advised masters thesis of Andreas Weinert at St. Andrews University.
He was accepted afterwards in the Ph.D. program at the University of Edinburgh
Thesis topic: The "sensual" cubic form.

Undergraduate students

Senior theses **Fall, 2006 – present**

Supervised senior thesis of Christopher Lee.
Supervised senior thesis of Paul Spiegelhalter.

Courses at UC Santa Cruz

Math 4, Mathemaics of Choice and Argument **Spring, 2009**

Moderate sized undergraduate class. 35 students enrolled.
Newly accepted by psychology department to satisfy premajor requirement.
New case studies in probability and statistics.
Oriented towards students who have difficulty with basic mathematics.

Math 222A, Algebraic Number Theory **Spring, 2009**

Moderate sized graduate class. 8 students enrolled.
140-pages of course notes produced and distributed freely.
Approach to number theory via lattices, using ideas of Tate.

Math 110, Introduction to Number Theory **Fall, 2008**

Large undergraduate class. 46 students enrolled.
New "SlugMath Wiki" utilized for course materials.
Students were required to learn LaTex to typeset mathematics.
Experimentation in Semantic Wikis for math education.

Math 203, Algebra IV **Fall, 2008**

Small graduate class. 5 students enrolled.
Great emphasis on problem-solving in commutative algebra.
Preparatory class for algebraic geometry and number theory.

Math 4, Mathemaics of Choice and Argument **Spring, 2008**

New course designed with course development fellowship.
9 students enrolled.
A case study approach to probability and statistics.

Math 296, Special student seminar **Fall, 2007**

Experimental graduate class. 4 students enrolled.
Covered modern foundations of mathematics, logic and model theory.
Weekly discussions for professional development for graduate students.
Discussions of mathematical writing, math education and policy.

Math 100, Introduction to Proof and Problem Solving **Fall, 2007**

Large undergraduate class. 41 students enrolled.

Math 111B, Algebra **Spring, 2007**

Small undergraduate class. 12 students enrolled.

Math 202, Algebra III **Spring, 2007**

Large graduate class. 15 students enrolled.

Math 222A, Algebraic Number Theory **Fall, 2006**

Small graduate class, 3 enrolled students.
Included the creation, with students, of an annotated guide to Serre's "Course in Arithmetic".