

Curriculum Vitae: Martin H. Weissman

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361 B Baskin Engineering Last updated February, 2011

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.

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 (26 out of 750 eligible UCSC faculty nominated.)	Academic year 2008-9	
	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 W.T.Gan. <i>Theta correspondence in a double cover of F_4</i> In progress.	2011	
	M.H. Weissman. <i>Managing Metaplectiphobia: Covering p-adic groups</i> To appear, “Harmonic analysis on reductive, p -adic groups”, edited by Loren Spice, Robert Doran, and Paul J. Sally, Jr., in Contemporary Mathematics.	2010	
PUBLISHED WRITINGS	M.H. Weissman and G. Savin. <i>Dichotomy for generic supercuspidal representations of G_2</i> To appear, Compositio Mathematica.	2010	
	M.H. Weissman and T.K. Howard. <i>Depth-Zero Representations of Nonlinear Covers of p-Adic Groups</i> International Mathematics Research Notices. Accepted May 8, 2009. 17 pages.	2009	
	M.H. Weissman. <i>Metaplectic Tori over Local Fields</i> Pacific Journal of Mathematics 241 (2009), No. 1. 169 – 200.	2009	
	M.H. Weissman. <i>Multiplying Modular Forms</i> 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.	2008	
	M.H. Weissman. <i>D_4 Modular Forms</i> American Journal of Mathematics 128 (2006), No. 4, 849-898.	2006	
	M.H. Weissman. <i>The Fourier-Jacobi Map and Small Representations</i> Represent. Theory 7 (2003), 259–274.	2003	
	UNIVERSITY SERVICE	<i>Undergraduate Vice Chair</i>	April, 2009 – present

Analyzed predictive validity of mathematics placement exam.
 Recommended undergraduate curriculum changes.
 Designed curriculum for new general education and disciplinary communication requirements.
 Served on transfer streamlining taskforce in Oakland.
 Managed individual requests for course substitution and transfer.

Hiring Committee **September 2010 – January, 2011**

Committee to select postdoctoral scholar.

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

Resulted in hire of Samit Dasgupta.

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

“The Euclidean algorithm and number sense” **February, 2011**
 Annual Retreat of *Math Solutions*, for professional development of K-12 teachers.
 San Francisco, CA

“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.

Variations on a Theme of Shimura and Waldspurger

University of California, Berkeley, Number Theory Seminar. **November, 2010**

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

Referee, Journal of the Ramanujan Mathematical Society	2009
Referee, Annales de la Faculte de Toulouse	2008
Referee, The Michigan Mathematical Journal	2007

Mathematics Education

Principal content provider for the Santa Cruz Math Teacher Circle.	Fall, 2010 - Present
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

<i>Mentor, NSF Postdoctoral Fellow</i>	Fall, 2009 - Present
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Supervising Scott Crofts in his NSF Postdoctoral Fellowship.
He will be present at UCSC for two years, 2009-11.

Graduate student supervision

<i>Ph.D. students</i>	Fall, 2008 – present
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Supervising Frederick Nitz in doctoral research.
Advanced to candidacy, Spring 2010.
Researching a mixed-characteristic analogue of the affine Grassmannian.
Supervising Chris Shelley in doctoral research.
Advanced to candidacy, Fall, 2010.
Researching Coxeter groups, incidence geometry, and arithmetic.
Supervising Paul Tokorchek in doctoral research.
Advanced to candidacy, Fall 2010.
Researching G_2 over p -adic fields.

<i>Masters student</i>	Fall, 2008
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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 Mitchell Owen.
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".