

# Amanda Beeson

Department of Mathematics  
University of California, San Diego

ambeeson@math.ucsd.edu  
<http://math.ucsd.edu/~ambeeson/>

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EDUCATION	<b>Massachusetts Institute of Technology</b> B.S. in Mathematics with Computer Science <b>University of California, San Diego</b> M.A. in Pure Mathematics Ph.D. in Mathematics	<i>June 2003</i> <i>Spring 2004</i> <i>expected June 2009</i>
RESEARCH	<b>Algebraic and Analytic Number Theory:</b> Stark conjectures, explicit class field theory, complex multiplication, modular units.  AMS subject classifications: : 11G16, 11M06, 11M35, 11R04, 11R18, 11R20, 11R27, 11R29, 11R33, 11R34, 11R37, 11R42.	
APPOINTMENTS	<b>Counselor</b> , PROMYS, Boston University Helped organise all aspects of summer program in elementary number theory for talented high school students; led high school research groups; gave mini-courses, talks, review sessions; organised and participated in counselor learning seminars; held head counselor position in Summer 2004. <b>Teaching Assistant</b> , Institute for Advanced Study, Princeton Taught zeta functions of graphs under Professor A. Terras at the Women and Mathematics Program. <b>Associate Instructor</b> , University of California, San Diego Taught precalculus course; wrote exams; oversaw TA and grader. <b>Teaching Assistant</b> , University of California, San Diego Taught calculus, discrete math, vector spaces, abstract algebra, and number theory. <b>Qual Prep Instructor</b> , University of California, San Diego Gave concise review of graduate algebra for qualifying exam preparation program; wrote practice qualifying exams. <b>Associate Instructor</b> , University of California, San Diego Taught linear algebra course; wrote exams; oversaw TA and MatLabs; received 92% approval rating on student reviews. <b>Adjunct Assistant Professor</b> , University of San Diego Taught two college algebra courses. <b>Associate Instructor</b> , University of California, San Diego Will teach differential equations course; write exams; oversee TA and MatLabs.	<i>Summers 2002-2004</i> <i>Spring 2006</i> <i>Fall 2007</i> <i>2003-2008</i> <i>Summers 2007-2008</i> <i>Summer 2008</i> <i>Fall 2008</i> <i>Winter 2009</i>
TALKS	<b>Bernoulli Numbers</b> , University of California, San Diego GAANN talk regarding Bernoulli numbers and the Riemann zeta function. <b>Multimodular Elimination</b> , University of California, San Diego Graduate research seminar about algorithm for fast row reduction of a matrix with entries in an arbitrary number field. <b>Graduate Learning Seminar</b> , University of California, San Diego Discussed ramification, culminating in a proof of quadratic reciprocity. <b>Modular Units</b> , University of California, San Diego Advancement to candidacy. <b>Class Field Theory Seminar</b> , University of California, San Diego Gave talks on Valuation Theory, Kummer Theory, and The Existence Theorem. <b>Group Cohomology</b> , University of California, San Diego Series of talks given to graduate number theory students. <b>Pentagons and Permutations</b> , University of California, San Diego Food for Thought seminar that provided a naïve introduction to modular forms through theta functions and a proof of Euler's Pentagonal Number Theorem.	<i>June 2004</i> <i>November 2005</i> <i>July 2006</i> <i>March 2007</i> <i>2007-2008</i> <i>Winter 2008</i> <i>February 2008</i>
AWARDS	GAANN Fellow UCSD Mathematics Department Outstanding TA Award	<i>2003-2004</i> <i>Spring 2008</i>