

# Evan P. Dummit

## Curriculum Vitae

Arizona State University	Citizenship: United States
School of Mathematical and Statistical Sciences	Birthplace: Burlington, VT
744 Wexler Hall	evan.dummit@gmail.com
Tempe, AZ 85287	evan.dummit@asu.edu

## Education

Jun 2009	<b>BS in Mathematics (with honors)</b> , California Institute of Technology
Jun 2009	<b>MS in Mathematics</b> , California Institute of Technology
May 2010	<b>MA in Mathematics</b> , University of Wisconsin-Madison
Aug 2014	<b>PhD in Mathematics</b> , University of Wisconsin-Madison <i>Advisor: Jordan S. Ellenberg</i> <i>Thesis Title: Counting number field extensions of given degree, bounded discriminant, and specified Galois closure</i>

## Academic Employment

2017–present	Postdoctoral Scholar, Arizona State University
2014–2017	Visiting Assistant Professor, University of Rochester
2012–2014	Doctoral Dissertator, University of Wisconsin-Madison
2009–2012	Doctoral Student, University of Wisconsin-Madison

## Selected Publications

in prep.	D. Dummit, <b>E. Dummit</b> , and H. Kisilevsky, <i>On the signature rank of the units in the cyclotomic field of <math>m</math>-th roots of unity.</i>
in prep.	<b>E. Dummit</b> , <i>The <math>\rho</math>-discriminant and applications.</i>
submitted	<b>E. Dummit</b> , <i>Characterizations of the <math>d</math>th-power residue matrices over finite fields.</i>
submitted	<b>E. Dummit</b> , <i>The number of quadratic, cubic, and quartic residue matrices.</i>
to appear	<b>E. Dummit</b> , <i>Counting <math>G</math>-extensions by discriminant</i> , Math. Res. Lett.
2016	<b>E. Dummit</b> , M. Hablicsek, R. Harron, L. Jain, R. Pollack, and D. Ross, <i>Explicit computations of Hida families via overconvergent modular symbols</i> , Research in Number Theory 2:25.
2016	D. Dummit, <b>E. Dummit</b> , and H. Kisilevsky, <i>A characterization of quadratic, cubic, and quartic residue matrices</i> , Journal of Number Theory 168:167–179.
2013	<b>E. Dummit</b> and M. Hablicsek, <i>Kakeya sets over non-archimedean local rings</i> , Mathematika 59.02:257–266.
2010	<b>E. Dummit</b> , A. Goldberg, and A. Perry, <i>A conjecture of Evans on sums of Kloosterman sums</i> , Proc. of the Amer. Math. Soc. 138:3047–3056.

## Selected Conferences and Talks

Mar 2018	University of Arizona Number Theory Seminar (invited talk) (planned)
Mar 2018	Arizona Winter School (planned)
Sep 2017	Arizona State University Number Theory Seminar (invited talk)
Sep 2017	Arizona State University Postdoc Seminar (invited talk)
Jun 2017	Canadian Discrete and Algorithmic Mathematics Conference, Ryerson University
Mar 2017	University of Vermont Mathematics Colloquium (invited talk)
Feb 2017	Quebec-Vermont Number Theory Seminar (invited talk)
Jan 2017	Joint Mathematics Meetings, Atlanta (contributed talk, session chair)
Nov 2016	Fields Medal Symposium (in honor of M. Bhargava), Fields Institute, Toronto
Oct 2016	University of Rochester Number Theory Seminar (invited talk)
Oct 2016	Quebec-Maine Number Theory Conference, Laval University
Sep 2016	Conference in Kummer Classes and Anabelian Geometry, UVM
Aug 2016	CTNT Conference on Elliptic Curves and Modular Forms, UConn
Jun 2016	$L$ -Functions and Arithmetic (“Rubifest”), Harvard University
Apr 2016	Upstate Number Theory Conference, U. of Rochester (contributed talk)
Dec 2015	RTG Workshop in Arithmetic Dynamics, U. of Michigan
Oct 2015	University of Rochester Number Theory Seminar (invited talk)
Aug 2015	Silvermania, Brown University
Apr 2015	Upstate Number Theory Conference, Cornell University (contributed talk)
Dec 2014	University of Rochester Number Theory Seminar (contributed talk)
Nov 2014	CRM Thematic Year Workshop: Counting Arithmetic Objects, U. de Montréal
Oct 2014	Cornell University Number Theory Seminar (invited talk)
Oct 2014	University of Rochester Algebraic Combinatorics Seminar (invited talk)
Oct 2014	Binghamton University Arithmetic Seminar (invited talk)
Sep 2014	University of Rochester Number Theory Seminar (invited talk)
Jun 2014	$p$ -adic Variation in Number Theory (“Glennfest”), Boston University
May 2014	Algebraic Techniques for Combinatorial and Computational Geometry, IPAM
Mar 2014	Arizona Winter School (Project Group: Number Field Asymptotics)
Jan 2014	Joint Mathematics Meetings, Baltimore (contributed talk)
Sep 2013	UW-Madison Graduate Number Theory Seminar (talk given)
May 2013	Atkin Memorial Lecture and Workshop on Cohen-Lenstra Heuristics, UIC
Apr 2013	UW-Madison Graduate Number Theory Seminar (talk given)
Mar 2013	Arizona Winter School (Project Group: Modular Curves at Infinite Level)
Jan 2013	Overconvergent Sage Days, UW-Madison
Nov 2012	Midwest Algebraic Geometry Conference, UW-Madison
Nov 2012	UW-Madison Graduate Number Theory Seminar (talk given)
Oct 2012	Quebec-Maine Number Theory Conference, Laval University (invited talk)
Oct 2012	Midwest Number Theory Conference, UIUC (contributed talk)
Oct 2012	UW-Madison Graduate Number Theory Seminar (talk given)
Mar 2012	Hawaii Conference in Algebraic Number Theory, Arithmetic Geometry, and Modular Forms
Jan 2012	UW-Madison Number Theory Seminar (invited talk)
Oct 2011	Midwest Number Theory Conference, UW-Madison (assistant organizer)
Oct 2011	UW-Madison Graduate Number Theory Seminar (talk given)
Mar 2011	Arizona Winter School (Project Group: Overconvergent Modular Symbols)
Feb 2011	UW-Madison Graduate Number Theory Seminar (talk given)
Dec 2010	UW-Madison Graduate Number Theory Seminar (talk given)
Nov 2010	Midwest Number Theory Conference, University of Michigan
Oct 2010	Midwest Algebraic Geometry Conference, UW-Madison
Jan 2010	UW-Madison Graduate Number Theory Seminar (talk given)
Nov 2009	Midwest Number Theory Conference, UW-Madison
Oct 2009	UW-Madison Graduate Number Theory Seminar (talk given)

## Teaching Experience

	ARIZONA STATE UNIVERSITY (2017–PRESENT)
Spring 2018	Instructor: Math 267 (Multivariable Calculus for Engineers)
Spring 2018	Instructor: Math 441 (Ring Theory)
Fall 2017	Instructor: Math 342 (Linear Algebra) <i>Course 4.59/5, Teaching 4.70/5, Instructor 4.77/5</i>
	UNIVERSITY OF ROCHESTER (2014–2017)
Spring 2017	Instructor: Math 235 (Linear Algebra) <i>Assignments 4.86/5 (avg 4.38), Teaching 4.84/5 (avg 4.26), Overall 4.95/5 (avg 4.31)</i>
Spring 2017	Instructor: Math 172 (Honors Calculus II) <i>Assignments 4.90/5 (avg 4.69), Teaching 4.79/5 (avg 4.62), Overall 4.87/5 (avg 4.73)</i>
Fall 2016	Instructor: Math 171 (Honors Calculus I) <i>Assignments 4.82/5 (avg 4.63), Teaching 4.76/5 (avg 4.42), Overall 4.92/5 (avg 4.62)</i>
Fall 2016	Instructor: Math 141 (Calculus I) <i>Assignments 4.58/5 (avg 4.23), Teaching 4.60/5 (avg 3.98), Overall 4.55/5 (avg 3.95)</i>
Spring 2016	Instructor: Math 233 (Mathematical Cryptography) <i>Assignments 4.60/5 (avg 4.52), Teaching 4.54/5 (avg 4.41), Overall 4.64/5 (avg 4.41)</i>
Spring 2016	Instructor: Math 165 (Linear Algebra & Differential Equations) <i>Assignments 4.51/5 (avg 4.17), Teaching 4.62/5 (avg 3.82), Overall 4.68/5 (avg 3.83)</i>
Fall 2015	Instructor: Math 215 (Chaos, Dynamics, and Fractals) <i>Assignments 4.69/5 (avg 4.51), Teaching 4.48/5 (avg 4.33), Overall 4.64/5 (avg 4.35)</i>
Fall 2015	Instructor: Math 164 (Multidimensional Calculus) <i>Assignments 4.70/5 (avg 4.15), Teaching 4.72/5 (avg 3.89), Overall 4.73/5 (avg 3.91)</i>
Spring 2015	Instructor: Math 165 (Linear Algebra & Differential Equations) <i>Assignments 4.18/5 (avg 4.17), Teaching 4.04/5 (avg 3.82), Overall 4.16/5 (avg 3.83)</i>
Spring 2015	Instructor: Math 143 (Calculus III) <i>Assignments 4.51/5 (avg 3.90), Teaching 4.54/5 (avg 3.78), Overall 4.57/5 (avg 3.73)</i>
Fall 2014	Instructor: Math 230 (Number Theory With Applications) <i>Assignments 4.94/5 (avg 4.50), Teaching 4.88/5 (avg 4.29), Overall 5.00/5 (avg 4.31)</i>
Fall 2014	Instructor: Math 141 (Calculus I) <i>Assignments 4.01/5 (avg 4.23), Teaching 4.05/5 (avg 3.98), Overall 3.93/5 (avg 3.95)</i>
	UNIVERSITY OF WISCONSIN-MADISON (2009–2014)
Summer 2014	Instructor: Summer Enhancement Program in Algebra (Graduate)
Spring 2014	Teaching Assistant: Math 240 (Discrete Mathematics) <i>Quality 4.92/5 (avg 4.42), Overall 4.90/5 (avg 4.51), Rating Superior</i>
Fall 2013	Teaching Coordinator: Instructional Excellence Program
Fall 2013	Teaching Assistant: Wisconsin Emerging Scholars Math 221 (Calculus 1) <i>Quality 5.00/5 (avg 4.10), Overall 4.95/5 (avg 4.32), Rating Superior</i>
Summer 2013	Instructor: Summer Enhancement Program in Algebra (Graduate)
Summer 2013	Teaching Assistant: Math 234 (Calculus 3)
Spring 2013	Teaching Assistant: Wisconsin Emerging Scholars Math 234 (Calculus 3) <i>Quality 5.00/5 (avg 4.50), Overall 4.91/5 (avg 4.56), Rating Superior</i>
Fall 2012	Teaching Coordinator: Math 221 (Calculus 1)
Spring 2012	Teaching Assistant: Math 320 (Linear Algebra & Differential Equations) <i>Quality 4.86/5 (avg 4.53), Overall 4.75/5 (avg 4.56), Rating Superior</i>
Spring 2011	Teaching Assistant: Math 222 (Calculus 2) <i>Quality 4.97/5 (avg 4.50), Overall 4.84/5 (avg 4.43), Rating Superior</i>
Fall 2010	Teaching Assistant: Math 211 (Business Calculus) <i>Quality 4.64/5 (avg 4.37), Overall 4.56/5 (avg 4.47), Rating Satisfactory-Plus</i>
Fall 2009	Teaching Assistant: Math 221 (Calculus 1) <i>Quality 4.67/5 (avg 4.34), Overall 4.49/5 (avg 4.44), Rating Satisfactory-Plus</i>

## Additional Teaching Experience

	UNIVERSITY OF WISCONSIN-MADISON (2009–2014)
Fall 2013	Grader: Math 741 (Abstract Algebra 1)
Spring 2013	Grader: Math 742 (Abstract Algebra 2)
Fall 2012	Grader: Math 741 (Abstract Algebra 1)
Spring 2012	Grader: Math 542 (Modern Algebra 2)
Fall 2011	Grader: Math 541 (Modern Algebra 1)
Spring 2011	Grader: Math 441 (Introduction to Groups and Rings)
Fall 2010	Grader: Math 541 (Modern Algebra 1)
Spring 2010	Grader: Math 541 (Modern Algebra 1)

## Research Appointments

	UNIVERSITY OF WISCONSIN-MADISON (2009–2014)
Fall 2012	Research Assistant
Fall 2011	Research Assistant
Summer 2010	VIGRE Fellow
Spring 2010	VIGRE Fellow

## Selected Outreach Lectures

May 2018	University of Vermont Math Day (featured speaker, planned)
Jan 2018	ASU High School Math Circle (featured speaker)
Nov 2017	ASU High School Math Circle (featured speaker)
Sep 2017	ASU High School Math Circle (featured speaker)
Mar 2017	University of Rochester Polynomial Method Seminar (guest lecture)
May 2016	Irondequoit HS Mathematics at Rochester (featured speaker)
Apr 2016	University of Rochester Freshman Fellows “Food For Thought” (featured speaker)
Feb 2016	Society of Undergraduate Mathematics Students, U. of Rochester (invited lecture)
Nov 2014	University of Vermont Putnam Seminar (leader)

## Undergraduate Research and Mentoring

Spring 2018	Faculty Supervisor, Honors Enrichment Contract for MAT 267 (Calculus III)
Fall 2017	Faculty Supervisor, Honors Enrichment Contract for MAT 342 (Linear Algebra)
Summer 2017	Co-organizer, REU on Applications of the Polynomial Method to Data Science, University of Rochester
Spring 2016	Supervisor, Math 391W (Independent Study: Mathematical Writing)

## Professional Development

Spring 2017	Mathematics Department Teaching Seminar, University of Rochester
Fall 2016	Mathematics Department Teaching Seminar, University of Rochester
Fall 2015	CIRTL MOOC in Evidence-Based STEM Teaching, Learning Community Member
Spring 2015	CETL College Course Development Fellow (MTH 143), University of Rochester
Fall 2014	CETL College Course Development Fellow (MTH 230), University of Rochester
Fall 2013	Wisconsin Emerging Scholars Teaching Assistant, Math 221, UW-Madison
Spring 2013	Wisconsin Emerging Scholars Teaching Assistant, Math 234, UW-Madison

## Research Interests

General	Algebraic number theory, algebraic combinatorics, arithmetic algebraic geometry, arithmetic dynamics.
Specific	Arithmetic statistics of number fields, algebraic combinatorics in finite fields and local rings, power residues in number fields and function fields, geometry of numbers, overconvergent modular symbols, competition/recreational mathematics.

## Honors, Awards, Fellowships

2014	CETL College Course Development Fellowship, University of Rochester
2014	Graduate Teaching Award in Mathematics, University of Wisconsin-Madison
2010	VIGRE Fellowship Award, University of Wisconsin-Madison
2009	NSF Graduate Research Fellowship Program, Honorable Mention
2008	Herbert J. Ryser Award, California Institute of Technology
2008	William Lowell Putnam Competition, Honorable Mention (score 67, rank 51.5)
2007	William Lowell Putnam Competition, Honorable Mention (score 58, rank 39)
2005	USA Mathematical Olympiad, Honorable Mention

## Outreach and Service

2017–present	National Question Writing Committee Member, MATHCOUNTS
Nov 2017	Volunteer Assistant, ASU Cryptorally
Feb 2017	Co-organizer, University of Rochester Math Olympiad
2016–present	Reviewer, Mathematical Reviews (MathSciNet)
2013–present	Problems Committee Chair, Vermont Math Talent Search
2011–present	Coach, Vermont Mathematics All-Stars (ARML)
2008–present	Problem Author, Vermont Math Talent Search
2007–present	Problem Author, University of Vermont High School Prize Exam in Mathematics
Apr 2013	Problem Contributor, Mega Math Meet
2012–2013	Problem Author, Mathleague.org

## Languages

English	Native Speaker
French	Fluent (reading)
Latin	Excellent
Programming	Mathematica, Sage, Magma, Java, Python, LaTeX, LyX, Moodle, WebWork

## Other

2009–2014	Member, American Mathematical Society
Summer 2009	Student Researcher, UW-Madison REU in Number Theory
2007–2009	Coaches' Choice Moderator, Caltech Quiz Bowl
2006–2009	Ruddock House Waiter, California Institute of Technology
Summer 2008	Counselor, Program in Mathematics for Young Scientists (PROMYS)
2001–2005	Certified SCUBA diver (NAUI)