

AMANDA L. FOLSOM

CONTACT Amherst College afolsom@amherst.edu
Department of Mathematics and Statistics www.amherst.edu/~afolsom
Amherst, MA 01002

EMPLOYMENT **Amherst College** 2014 – present
Associate Professor

Yale University
Associate Professor 2014
Assistant Professor (Tenure-Track) 2010 – 2013

University of Wisconsin-Madison 2007 – 2010
National Science Foundation Postdoctoral Fellow
and Van Vleck Assistant Professor

Max-Planck-Institut für Mathematik, Bonn, Germany 2006 – 2007
Postdoctoral Fellow

EDUCATION **Ph.D. Mathematics** University of California, Los Angeles Jun. 2006
M.S. Mathematics University of California, Los Angeles Dec. 2002
B.A. Mathematics University of Chicago (with honors) Jun. 2001

**GRANTS,
HONORS
& AWARDS** **National Science Foundation CAREER Grant (P.I.)** 2013 – 2019
DMS-1449679 and DMS-1252815, \$437,000

Institute for Advanced Study, Princeton Spring 2016
von Neumann Fellowship and Member

National Science Foundation Conference Grant (co-P.I.) 2016
DMS-1608789, \$25,000

Amherst College Trustee Faculty Fellowship 2015 – 2016

National Science Foundation Grant (P.I.) 2010 – 2013
DMS-1049553, \$75,875

Yale University Junior Faculty Fellowship 2012 – 2013

National Science Foundation Postdoctoral Fellowship (P.I.) 2007 – 2010
DMS-0701461, \$108,000

University of Wisconsin-Madison Honored Instructors Award 2009

University of California Dissertation Year Fellowship 2005 – 2006

UCLA Graduate Research Mentorship Fellowship 2004 – 2005

National Science Foundation VIGRE Graduate Fellow 2001 – 2002

Phi Beta Kappa 2001

Sigma Xi 2001, 2015

University of Chicago - B.A. degree honors 2001

Salutatorian Bishop Fenwick High School 1997

VISITING POSITIONS (*while on sabbatical leaves*)

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|---|-----------------------|
| Institute for Advanced Study, Princeton von Neumann Fellow and Member | Spring 2016 |
| Max-Planck-Institut für Mathematik, Bonn, Germany Visiting Researcher | Fall 2015/Spring 2013 |
| Emory University Visiting Researcher in the Dept. of Mathematics | Fall 2012 |

EDITORSHIPS

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|--|----------------|
| Associate Editor , <i>Journal of Number Theory</i> a peer-reviewed international research journal, published by Elsevier | 2017 – present |
| Editorial Board Member , <i>Research in Number Theory</i> a peer-reviewed international research journal, published by Springer | 2014 – present |
| Editorial Board Member , <i>Proceedings of the American Math. Soc.</i> a peer-reviewed int'l research journal in all areas of math, published by the AMS | 2018 – present |

RESEARCH INTERESTS

Analytic and Algebraic Number Theory, Modular Forms, (harmonic) Maass Forms, Mock Theta Functions, Jacobi Forms, Combinatorics, q -series, Lie/Representation Theory, Quantum Modular Forms, Modular Units.

PUBLICATIONS I. BOOK

1. K. Bringmann, A. Folsom, K. Ono, and L. Rolin, *Harmonic Maass forms and mock modular forms: theory and applications*, **American Mathematical Society Colloquium Book Series**, (submitted 12/2016), ~400 pp.

II. RESEARCH ARTICLES

1. M. Barnett[◇], A. Folsom, O. Ukogu[◇], W.J. Wesley[◇], and H. Xu[◇], *Quantum Jacobi forms and balanced unimodal sequences*, submitted.
2. K. Bringmann and A. Folsom, *Quantum Jacobi forms and finite evaluations of unimodal rank generating functions*, **Archiv der Mathematik** 107 (2016), 367–378.
3. K. Bringmann, A. Folsom, and A. Milas, *Asymptotic behavior of partial and false theta functions arising from Jacobi forms and regularized characters*, **Journal of Mathematical Physics** 58 011702 (2017), 19 pp.
4. A. Folsom, S. Garthwaite, S-Y Kang, H. Swisher, S. Treneer, *Quantum mock modular forms arising from eta-theta functions*, **Research in Number Theory** 2:14 (2016), 41 pp.
5. A. Folsom, *Mock and mixed mock modular forms in the lower half-plane*, **Archiv der Mathematik** 107 (2016), 487–498.
6. A. Folsom and P. Jenkins, *Zeros of modular forms of half integral weight*, **Research in Number Theory** 2:23 (2016), 25pp.
7. A. Folsom, C. Ki[◇], Y.N. Truong Vu[◇], and B. Yang[◇], *Strange combinatorial quantum modular forms*, **Journal of Number Theory** 170 (2017), pp. 315–346.
8. A. Folsom, Y. Homma[‡], J. Ryu[‡], B. Tong[‡], *On a general class of non-squashing partitions*, **Discrete Mathematics** 339 iss. 5 (2016), pp. 1482–1506.

[◇]Amherst College undergraduate student co-author.

[‡]Yale University undergraduate student co-author.

9. K. Bringmann, A. Folsom, and K. Mahlburg, *Quasimodular forms and $sl(m|m)^\wedge$ characters*, **Ramanujan Journal** 36 (2015), pp. 103–116.
10. K. Bringmann, A. Folsom, and R.C. Rhoades, *Unimodal sequences and “strange” functions: a family of quantum modular forms*, **Pacific Journal of Mathematics** 274 no. 1 (2015), pp. 1–25.
11. A. Folsom, W. Kohnen, and S. Robins, *Conic theta functions and their relations to theta functions*, **Annales de l’Institut Fourier (Grenoble)** 65 no. 3 (2015), pp. 1133–1151.
12. K. Bringmann, C. Calinescu, A. Folsom, and S. Kimport^b, *Graded dimensions of principal subspaces and modular Andrews-Gordon series*, **Communications in Contemporary Mathematics** 16 no. 4 (2014), 1350050, 20 pp.
13. K. Bringmann and A. Folsom, *Almost harmonic Maass forms and Kac-Wakimoto characters*, **Journal für die reine und angewandte Mathematik (Crelle’s Journal)** 694 (2014), pp. 179–202.
14. A. Folsom, *Mock modular forms and d -distinct partitions*, **Advances in Mathematics** 254 (2014), pp. 682–705.
15. A. Folsom, K. Ono, and R.C. Rhoades, *Ramanujan’s radial limits*, **Contemporary Mathematics** 627, Ramanujan 125, pp. 91–102, eds. K. Alladi, F. Garvan, and A.J. Yee, American Mathematical Society (2014).
16. K. Bringmann and A. Folsom, *On a conjecture of B. Berndt and B. Kim*, **Ramanujan Journal** 32 (2013), pp. 1–4.
17. K. Bringmann and A. Folsom, *On the asymptotic behavior of Kac-Wakimoto characters*, **Proceedings of the American Mathematical Society** 141 no. 5 (2013), pp. 1567–1576.
18. A. Folsom and S. Kimport^b, *Mock modular forms and singular combinatorial series*, **Acta Arithmetica** 159.3 (2013), pp. 257–297.
19. A. Folsom, K. Ono, and R.C. Rhoades, *Mock theta functions and quantum modular forms*, **Forum of Mathematics Pi** 1 (2013), pp. 1–27.
20. K. Bringmann, A. Folsom, and R.C. Rhoades, *Partial theta functions and mock modular forms as q -hypergeometric series*, **Ramanujan Journal** 29 (2012), pp. 295–310.
21. W. Castryck, A. Folsom, H. Hubrechts, and A.V. Sutherland, *The probability that the number of points on the Jacobian of a genus 2 curve is prime*, **Proceedings of the London Mathematical Society (3)** 104 (2012), pp. 1235–1270.
22. A. Folsom, Z. Kent, and K. Ono, *ℓ -adic properties of the partition function*, **Advances in Mathematics** 229 (2012), pp. 1586–1609.
23. A. Folsom, *Kac-Wakimoto characters and universal mock theta functions*, **Transactions of the American Mathematical Society** 363 no. 1 (2011), pp. 439–455.
24. A. Folsom and R. Masri, *The asymptotic distribution of traces of Maass-Poincaré series*, **Advances in Mathematics** 226 (2011), pp. 3724–3759.
25. A. Folsom, *Modular units and the q -difference equations of Selberg*, **Mathematical Research Letters** (17) no. 2 (2010), pp. 283–299.
26. A. Folsom, *Modularity and the distinct rank function*, **Ramanujan Journal** 23 (2010), pp. 183–193.
27. A. Folsom and R. Masri, *Equidistribution of Heegner points and the partition function*, **Mathematische Annalen** 348 no. 2 (2010), pp. 289–317.
28. K. Bringmann, A. Folsom, and K. Ono, *q -series and weight $3/2$ Maass forms*, **Compositio Mathematica** 145 (2009), pp. 541–552.

^bYale University graduate student co-author.

29. A. Folsom, *A characterization of the modular units*, **International Journal of Number Theory** (5) no. 2 (2009), pp. 303–310.
30. A. Folsom, *A short proof of the mock theta conjectures using Maass forms*, **Proceedings of the American Mathematical Society** 136 (2008), pp. 4143–4149.
31. A. Folsom, *Class invariants and cyclotomic unit groups from special values of modular units*, **Journal de Théorie des Nombres de Bordeaux** (20) no. 2 (2008), pp. 289–325.
32. A. Folsom and K. Ono, *Duality involving the mock theta function $f(q)$* , **Journal of the London Mathematical Society** (2) 77 (2008), pp. 320–334.
33. A. Folsom and K. Ono, *The spt -function of Andrews*, **Proceedings of the National Academy of Sciences, USA** 105 no. 51 (2008), pp. 20152–20156.
34. A. Folsom, *Modular forms and Eisenstein’s continued fractions*, **Journal of Number Theory** 117 (2006), pp. 279–291.
35. E. Burger, A. Folsom[‡], A. Pekker[‡], R. Roengpitya[‡], and J. Snyder[‡], *On a quantitative refinement of the Lagrange spectrum*, **Acta Arithmetica** 102.1 (2002), pp. 55–82.

III. EXPOSITORY ARTICLES AND BOOK REVIEW

1. A. Folsom, *Book Review: “My Search For Ramanujan” by K. Ono and A. Aczel*, **Bhavana** vol. 1 iss. 2., April 2017.
2. A. Folsom, *Perspectives on mock modular forms*, **Journal of Number Theory** 176 (2017), 500–540.
3. J. Bruinier, A. Folsom, Z. Kent, and K. Ono, *Recent work on the partition function*, **Ramanujan Mathematical Society Lecture Notes** 20 (2013), eds. B.C. Berndt and D. Prasad, pp. 139–151.
4. A. Folsom, *WHAT IS... a mock modular form?*, **Notices of the American Mathematical Society** 57 iss. 11 (2010), pp. 1441–1443.
5. A. Folsom, *Book Review: The 1-2-3 of modular forms*, by J.H. Bruinier, G. van der Geer, G. Harder, and D. Zagier. **Bulletin of the American Mathematical Society** 46 (2009), pp. 527–533.

INVITED RESEARCH TALKS

- | | |
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| 1. Boston University, Seminar | May 2017 |
| 2. Brown University, Seminar | February 2017 |
| 3. Bucknell University, Distinguished Visitor, Colloquium | Apr. 2016 |
| 4. Penn. State University, Seminar | Apr. 2016 |
| 5. Institute for Advanced Study, Princeton, Member Seminar | Feb. 2016 |
| 6. Heidelberg University, Germany, Colloquium | Dec. 2015 |
| 7. Max-Planck-Institut, Bonn, Germany, Seminar | Dec. 2015 |
| 8. TU Darmstadt, Germany, Seminar | Dec. 2015 |
| 9. University College, Dublin, Seminar | Nov. 2015 |
| 10. SUNY Albany, Colloquium | Sept. 2015 |
| 11. University of Cologne, Germany, Seminar | Jun. 2015 |
| 12. Temple University, Colloquium | Apr. 2015 |
| 13. University of Massachusetts, Amherst, Geometry Seminar | Mar. 2015 |
| 14. Tulane University, Colloquium | Jan. 2015 |
| 15. Brandeis-Harvard-MIT-Northeastern, Joint Colloquium | Nov. 2014 |

[‡]undergraduate student co-author.

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| 16. Amherst College , Five College Number Theory Seminar | Sept. 2014 |
| 17. Wesleyan University , Colloquium | May 2014 |
| 18. Texas A&M University , Seminar | Apr. 2014 |
| 19. Yale University , Junior Colloquium | Apr. 2014 |
| 20. Johns Hopkins University , Colloquium | Oct./Nov. 2013 |
| 21. Heidelberg University, Germany , Seminar | May 2013 |
| 22. Max-Planck-Institut, Bonn, Germany , Oberseminar | Apr. 2013 |
| 23. Université de Nice, France , Seminar | Apr. 2013 |
| 24. University College Dublin, Ireland , Seminar | Apr. 2013 |
| 25. University of Cologne, Germany , Seminar | Apr. 2013 |
| 26. Brigham Young University , Colloquium | Jan. 2013 |
| 27. University of Wisconsin-Madison , Colloquium | Dec. 2012 |
| 28. University of Illinois, Urbana-Champaign , Seminar | Oct. 2012 |
| 29. Emory University , Seminar | Sept. 2012 |
| 30. Northeastern University , Seminar | Apr. 2012 |
| 31. University of Connecticut, Storrs , Seminar | Apr. 2012 |
| 32. Yale University , Seminar | Feb. 2012 |
| 33. Emory University , Seminar | Dec. 2011 |
| 34. University of Massachusetts, Amherst , Seminar | Nov. 2011 |
| 35. Northwestern University , Seminar | Apr. 2011 |
| 36. Boston College-MIT , Joint Seminar | Feb. 2011 |
| 37. CUNY Graduate Center , Seminar | Dec. 2010 |
| 38. SUNY Stony Brook , Seminar | Dec. 2010 |
| 39. University of Cologne, Germany , Seminar | Nov. 2010 |
| 40. MIT , ∞ -dim'l Lie Algebras Seminar | Oct. 2010 |
| 41. Wesleyan University , Colloquium | Oct. 2010 |
| 42. Yale University , Arithmetic Geometry Seminar | Sept. 2010 |
| 43. Yale University , Colloquium | Feb. 2010 |
| 44. University of Pittsburgh , Colloquium | Jan. 2010 |
| 45. University of Texas, Austin , Seminar | Jan. 2010 |
| 46. POSTECH, Pohang, Korea , Seminar | Dec. 2009 |
| 47. Rutgers University , Colloquium | Dec. 2009 |
| 48. Rice University , Colloquium | Nov. 2009 |
| 49. University of Wisconsin-Madison , Seminar | Sept. 2009 |
| 50. University of Wisconsin-Madison , Seminar | Nov. 2008 |
| 51. University College Dublin , Seminar | Feb. 2008 |
| 52. McMaster University, Canada , Arithmetic Geometry Seminar | Nov. 2007 |
| 53. Stanford University , Seminar | Nov. 2007 |
| 54. University of South Carolina , Seminar | Nov. 2007 |
| 55. University of Illinois, Urbana-Champaign , Seminar | Oct. 2007 |
| 56. University of Wisconsin-Madison , Seminar | Oct. 2007 |

- 57. **Amherst College**, Five College Number Theory Seminar May 2007
- 58. **University of Wisconsin-Madison**, Seminar May 2007
- 59. **ETH Zurich, Switzerland**, Seminar Dec. 2006
- 60. **Max-Planck-Institut, Bonn, Germany**, Seminar Sept. 2006
- 61. **Princeton University**, Seminar May 2006
- 62. **University of California, Los Angeles**, Seminar Feb. 2006
- 63. **Boston University**, Algebra Seminar Nov. 2005
- 64. **University of Wisconsin-Madison**, Seminar Feb. 2005
- 65. **Harvard University**, Graduate Student Seminar Jul. 2004

**CONFERENCE
AND
WORKSHOP
TALKS**

- 1. **Modular Forms and Quantum Knots, BIRS, Banff** March 2018
- 2. **AMS-MAA Joint Meetings, San Diego** special session Jan. 2018
- 3. **AMS Eastern Sectional, Hunter College**, closing speaker May 2017
- 4. **Connecticut Summer School in Number Theory, UConn** Aug. 2016
- 5. **Gainesville Number Theory Conference, UFlorida** Mar. 2016
- 6. **Illinois Number Theory Conference, UIUC** Aug. 2015
- 7. **Assoc. Women in Math. Research Symposium, UMaryland** Apr. 2015
- 8. **TORAS University of Oklahoma**, keynote speaker Mar. 2015
- 9. **AMS-MAA Joint Meetings, San Antonio**, special session Jan. 2015
- 10. **Southern California Number Theory Day, UC-Irvine** Oct. 2014
- 11. **AMS Eastern Sectional, Temple University**, special session Oct. 2013
- 12. **Ramanujan 125**, University of Florida Nov. 2012
- 13. **University of Illinois Number Theory Conference** Oct. 2012
- 14. **Building Bridges: EU-US Conf.**, Aachen University, Germany Aug. 2012
- 15. **Yale Science and Engineering Forum** Apr. 2012
- 16. **Krupp Symposium**, University of Cologne, Germany Feb. 2012
- 17. **AMS-MAA Joint Meetings, Boston**, special session Jan. 2012
- 18. **Quebec-Maine Number Theory Conference** Oct. 2011
- 19. **CUNY Conference on Symmetric Groups** Sept. 2011
- 20. **AMS Eastern Spring Sectional, Holy Cross**, special session Apr. 2011
- 21. **ICTP Conference on Mock Modular Forms**, Trieste, Italy Mar. 2011
- 22. **AMS-MAA Joint Meetings, New Orleans**, special session Jan. 2011
- 23. **AMS-CMS Joint Meeting**, Pucon, Chile Dec. 2010
- 24. **University of Hawaii Workshop on Automorphic Forms** Mar. 2010
- 25. **KMS-AMS Winter Meeting**, Seoul, Korea Dec. 2009
- 26. **Mock ϑ -functions and Applications**, MPIM Bonn, Germany May 2009
- 27. **1047th Meeting of the AMS**, UIUC Mar. 2009
- 28. **University of Florida Conference on Quadratic Forms** Mar. 2009
- 29. **PANTS VIII**, U. South Carolina, plenary speaker Dec. 2008
- 30. **University of Hawaii Workshop on Automorphic Forms** May 2008
- 31. **University of Florida Number Theory Conference** Mar. 2008

32. **AMS-MAA Joint Meetings, San Diego**, special session Jan. 2008
33. **SASTRA-Ramanujan Conference**, Kumbakonam, India Dec. 2007
34. **The Fields Institute Workshop** Nov. 2007
35. **Heini Halberstam's 80th Birthday Conference**, UIUC May 2007
36. **21st Automorphic Forms Workshop**, UC-Santa Barbara Mar. 2007
37. **Jahrestagung der DMV**, Uni. Bonn, Germany Sept. 2006
38. **20th Automorphic Forms Workshop**, UC-Boulder Mar. 2006
39. **19th Automorphic Forms Workshop**, U. North Texas Mar. 2005
40. **18th Automorphic Forms Workshop**, UC-Santa Barbara Mar. 2004
41. **Summer School in Analytic Number Theory**, Catalina, CA Aug. 2003
42. **AMS-MAA Joint Meetings, New Orleans**, undergrad. prize Jan. 2001
43. **MAA Regional Meeting**, St. Paul's School, NH Jun. 2000

**OTHER
CONFERENCES
AND MEETINGS**

1. **AMS-MAA Joint Meetings, Atlanta** Jan. 2017
2. **MAA Mathfest, Washington D.C.** Aug. 2015
3. **AIM SQuaREs Workshop** Jul. 2015
4. **REU Mini-Symposium at UConn** Jul. 2015
5. **University of Cologne, research visits** 5/2011, 11/2011, 5/2012, 6/2015
6. **Automorphic Forms Conf., CIRM Luminy, France** May 2015
7. **MAA Mathfest, Portland, OR** Aug. 2014
8. **REU Mini-Symposium at Yale** Jul. 2014
9. **AMS-MAA Joint Meetings, Baltimore** Jan. 2014
10. **Simons Center Workshop: Mock/Moonshine/String** Aug. 2013
11. **Mount Holyoke College, New Directions for REUs** Jun. 2013
12. **Hypergeometric Series, Institut Henri Poincaré, Paris** May 2012
13. **AIM Workshop on Cohen-Lenstra Heuristics** Jun. 2011
14. **University College Dublin, research visit** May 2011
15. **Emory University Conference on Partitions** Jan. 2011
16. **AIM Workshop on Mock Modular Forms** Mar. 2010
17. **AMS-MAA Joint National Meetings, San Francisco** Jan. 2010
18. **Columbia University, D. Goldfeld's 60th Bday Conference** May 2007
19. **Oxford Club NYC: Wiles & Du Sautoy** (guest of F.H. Schott) Apr. 2007
20. **Conf. on Modular/Diophantine, MPIM Bonn, Germany** Feb. 2007
21. **Universiteit Leiden, Netherlands, Intercity Num. Th.** Sept. 2006
22. **Columbia University, Galois Repns./L-fns./Arithmetic** Jun. 2006
23. **Princeton/IAS Zeta Functions Women's Program** May 2006
24. **AMS-MAA Joint National Meetings, San Antonio** Jan. 2006
25. **Southern California Number Theory Day, UC-Irvine** Oct. 2005
26. **Gauss-Dirichlet Conference, Göttingen, Germany** Jun. 2005
27. **Southern California Number Theory Day, UCSD** May 2005

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| | 28. University of Florida, Additive Number Theory | Nov. 2004 |
| OTHER RESEARCH | National Science Foundation REU Participant Williams College SMALL Program | Summer 2000 |
| PROFESSIONAL MEMBERSHIPS | American Mathematical Society (AMS) Association for Women in Mathematics (AWM) Sigma Xi, The Scientific Research Society | |
| PUBLIC AND UNDERGRAD. EVENTS | 1. College of the Holy Cross , PME undergrad. colloquium | May 2017 |
| | 2. Queer Resource Center , Amherst Coll., documentary interview | Jun. 2015 |
| | 3. Queer Resource Center , Amherst Coll., faculty-student discussion | Apr. 2015 |
| | 4. Women's & Gender Cntr. Amherst Coll., discussion with students | Oct. 2014 |
| | 5. Center for Women in Math. , Smith Coll., undergrad. lecture | Oct. 2014 |
| | 6. Yale Math Club (YUMS) , undergraduate lecture | Apr. 2014 |
| | 7. Amherst College , undergrad lecture | Jan. 2014 |
| | 8. Yale University Math Mornings , public lecture | Nov. 2013 |
| | 9. Center for Women in Math. , Smith Coll., undergrad. lecture | Nov. 2012 |
| | 10. Emory U. , Environmental Sci.120, undergraduate lecture | Oct.2012 |
| | 11. UConn , Preparing Future Faculty, panelist | Apr. 2012 |
| | 12. Naugatuck Valley Comm. Coll. , Women in Science speaker | Mar. 2012 |
| | 13. Yale Math Club (YUMS) , undergraduate lecture | Sept. 2011 |
| | 14. Tilde Cafe, Branford, CT , public lecture/local TV | Mar. 2011 |
| | 15. MAA Joint Meetings, New Orleans , undergraduate lecture | Jan. 2011 |
| | 16. MIT: Women in Mathematics Lectures | Oct. 2010 |
| | 17. UW-Madison Math Club , undergraduate lecture | Apr. 2009 |
| | 18. Amherst College , undergraduate lecture | Nov. 2005 |
| PUBLIC SCHOOL OUTREACH | EYE on Mathematics: Edgewood-Yale Educational Outreach | 2012–15 |
| | Founder of this math enrichment program at the K-8 public Edgewood School in New Haven, CT, in partnership with Principal R. Reynolds, and math teachers C. Piersanti and C. Boynton. Led supplementary-to-classroom creative projects for 5th graders every other week, chosen to emphasize YNI philosophies. | |
| | Yale National Initiative (YNI) | Summer 2011 |
| | YNI is a sustained collaboration between Yale faculty members and public school teachers from across the U.S. Co-led the seminar "Great Ideas in Math." with R. Howe, and supervised the writing/publishing of teachers' curriculum units. | |
| | Mathcounts Outreach | 2012–14 |
| | Faculty advisor to the Yale-New Haven chapter of the national Mathcounts program, which functions to enhance achievement in middle school mathematics. | |

**TEACHING
EXPERIENCE**

I. AT AMHERST COLLEGE (Assoc. Prof.)

| Semester | Course | Name |
|-------------|-----------|------------------------------------|
| Fall 2014 | MATH 111 | Introduction to the Calculus |
| | MATH 225 | Chaos and Fractals |
| Spring 2015 | MATH 111 | Introduction to the Calculus |
| | MATH 350 | Groups, Rings and Fields |
| Fall 2015 | — | <i>(sabbatical leave)</i> |
| Spring 2016 | — | <i>(sabbatical leave)</i> |
| Fall 2016 | MATH 225 | Fractal Geometry |
| | MATH 310* | Intro. to the Theory of Partitions |
| Spring 2017 | MATH 111 | Introduction to the Calculus |
| Fall 2017 | MATH 111 | Introduction to the Calculus |
| | MATH 281* | Combinatorics |
| Spring 2018 | MATH 111 | Introduction to the Calculus |
| | MATH 460* | Analytic Number Theory |

**introduced to the curriculum*

II. AT YALE UNIVERSITY (Asst./Assoc. Prof.)

| Semester | Course | Name |
|-------------|------------|--|
| Fall 2010 | MATH 632a* | Modular Forms (Graduate) |
| Spring 2011 | MATH 355b | Geometric Algebra |
| Fall 2011 | MATH 112a | Calculus of Functions of One Variable |
| Spring 2012 | MATH 290b | Fractal Geometry |
| | MATH 354b | Number Theory |
| | SEMINAR | Lang Lunch Teaching Seminar (Graduate) |
| Fall 2012 | — | <i>(sabbatical leave)</i> |
| Spring 2013 | — | <i>(sabbatical leave)</i> |
| Summer 2013 | MATH 112a | Calculus of Functions of One Variable |
| Fall 2013 | MATH 222a | Linear Algebra with Applications |
| Spring 2014 | MATH 290b | Fractal Geometry |
| | MATH 634b* | Modular/Weak Maass Forms (Graduate) |

**introduced to the curriculum*

III. AT UNIVERSITY OF WISCONSIN-MADISON (Postdoc./Asst. Prof.)

| Semester | Course | Name |
|-------------|----------|-------------------------------------|
| Fall 2007 | — | <i>(NSF fellowship)</i> |
| Spring 2008 | — | <i>(NSF fellowship)</i> |
| Fall 2008 | MATH 748 | Algebraic Number Theory (Graduate) |
| Spring 2009 | MATH 421 | The Theory of Calculus |
| Fall 2009 | MATH 320 | Linear Algebra & Differential Eqns. |
| Spring 2010 | MATH 320 | Linear Algebra & Differential Eqns. |

IV. OTHER TEACHING EXPERIENCE

| Date | Location | Description |
|-------------|-------------|--|
| 2002 – 2004 | UCLA** | T.A. for Calc., Hon. Calc., Diff. Eq., Lin. Alg. |
| Fall 2002 | UCLA** | Professor apprenticeship, teaching-training |
| Fall 2003 | UCLA** | PEERS Calculus for underrep'd minorities |
| Winter 2004 | UCLA** | PEERS Calculus for underrep'd minorities |
| May 2006 | Princeton** | T.A. at undergrad. women's program |
| March 2013 | U. Arizona | Faculty asst. at graduate research program |

** *taught while a graduate student*

STUDENT RESEARCH ADVISED

Undergraduate thesis students

- William (Jack) Wesley, '18 (Amherst College): *in preparation*.
- Michael Barnett, '18 (Amherst College): (co-advisor) *in preparation*.
- Yen Nhi Truong Vu, '17 (Amherst College): *On the modular transformations and asymptotic behaviors of mock modular forms*.
Recipient of the Breusch Prize in Math., Summa Cum Laude.
- Edward J. Kim, '15 (Amherst College): *The Circle Method in Number Theory*.
Co-recipient of the Breusch Prize in Math., Summa Cum Laude.

Ph.D. thesis student

- Susie Kimport, '15 (Yale University): *Quantum modular forms, mock modular forms, and partial theta functions*. First Job: Stanford U. Lecturer

Summer undergraduate research advised

- Summer 2017 (Amherst College): research project advisor to M. Barnett '18, O. Ukogu '18, W. Wesley '18, H. Xu '18. *Quantum Jacobi forms and balanced unimodal sequences*, preprint.
- Summer 2015 (Amherst College): research project advisor to C. Ki '17, Y.N. Truong Vu '17, B. Yang '18, *Strange combinatorial quantum modular forms*, submitted for publication (2015), 24pp.
- Summer 2014 (Yale University): co-founder/director of math. research program SUMRY with S. Payne, and research project advisor to Y. Homma '16, J.H. Ryu '16, B. Tong '17, *On a general class of non-squashing partitions*, Discrete Math, 229 (2016), 25pp.
- Summers 2007, 2008, 2009, 2010 (University of Wisconsin-Madison): NSF REU Instructor; advised/co-advised small groups of undergrads. from various U.S.

institutions on original number theory research. 18 student papers submitted.

Other research advised

- Women in Numbers 4, BIRS, Canada, Aug. 2017: Project Leader/Advisor of an original number theory research project for a small group of women mathematicians at various career stages (graduate student, postdoc, junior faculty).

DEPARTMENT AND COLLEGE SERVICE

Amherst College

- Faculty Committee on Admission and Financial Aid (FCAFA) 2016 – present
- New Student Orientation Advisor Summers 2016, 2017
- Mathematics Comprehensive Exam Organizer/Advisor 2016-17
- Honors thesis advisor, E. Kim '15, Y.N. Truong Vu '17 2014–15, 2016–17
- Chair, CT Valley Mathematics Colloquium Fall 2016
- Secretary, typing of weekly department meeting minutes Spring 2015
- Grader, Mathematics Comprehensive Exam in Algebra Spring 2015

Yale University

- Ph.D. advisor, S. Kimport '15 2011–15
- co-organizer, Number Theory Seminar 2010–14
- Faculty Fellow, Saybrook undergraduate residential college 2012–14
- Academic advisor, Samuel Kim '16 2012–14
- Departmental/University committees member (please ask for details) 2010–14

University of Wisconsin

- Committee member, Math. Research Mentoring and Diversity 2008–09
- Mentor/co-organizer, Graduate Student Number Theory Seminar 2008–09
- Grader, Graduate Algebra Qualifying Exam 2010

UCLA (while a graduate student)

- Graduate student mentor 2002–06
- PEERS program mentor, Zalya Sanchez-Galvan '07 2003–04
- Dept. panelist; topics: fellowships, gender equity, TA training 2004–06

MATH COMMUNITY SERVICE

Conferences/Workshops co-organized

- 32nd Automorphic Forms Workshop March 2018
- CTNT Summer School & Research Conference, NSF funded (co-PI) Aug. 2016
- REU Mini-Symposium at Yale University Jul. 2014
- AMS Fall Sectional Meeting, special session, U. Arizona Oct. 2012
- AMS-MAA National Meeting, special session, Washington D.C. Jan. 2009

Women in Mathematics

- Women in Numbers 4, Research Project Advisor, BIRS Canada Aug. 2017
- Judge at AWM Women Grad. Research Poster Sess., JMM Atlanta Jan. 2017
- Mentor, Association for Women in Math. Mentor Network 2015 – present
- Smith College Center for Women and Math., speaker Nov. 2012, Oct. 2014
- Naugatuck Valley C.C., Women in Science speaker Mar. 2012
- Zeta functions Women's Program, Course Asst., Princeton/IAS May 2006

Panels served

- “Applying to graduate school,” REU mini-symposium, Yale Jul. 2014
- “Preparing future faculty,” UConn Apr. 2012
- “Women in mathematics,” Women in Science Conference, Yale Fall 2011
- “Liberal arts vs. research univ.,” Automorphic Forms Workshop Mar. 2010

Editorial Board Member

- *Research in Number Theory*, a Springer peer-reviewed journal 2014 – present

- *Journal of Number Theory*, an Elsevier peer-reviewed journal 2017 – present
- *Proc. Amer. Math Soc.*, an AMS peer-reviewed journal 2018 – present

Journal Refereeing

Selected journals: Advances in Mathematics, Annals of Mathematics, Applied Mathematics Letters, Duke Journal of Mathematics, International Mathematics Research Notices, Israel Journal of Mathematics, Journal of Number Theory, Proceedings of the National Academy of Sciences, Proceedings of the American Mathematical Society, Ramanujan Journal.

— *last updated August 26, 2017* —