

AMANDA L. FOLSOM

CONTACT INFORMATION	Amherst College Department of Mathematics and Statistics Amherst, MA 01002	afolsom@amherst.edu http://www.amherst.edu/~afolsom
RESEARCH INTERESTS	Analytic and Algebraic Number Theory, Harmonic Maass Forms, Modular Forms, Jacobi Forms, Mock and Quantum Modular Forms, Combinatorics, Lie Theory	
EDUCATION	Ph.D. Mathematics University of California, Los Angeles <i>Advisor: William D. Duke</i>	Jun. 2006
	M.S. Mathematics University of California, Los Angeles	Dec. 2002
	B.A. Mathematics University of Chicago (with honors)	Jun. 2001
EMPLOYMENT	<ul style="list-style-type: none">• Amherst College Full Professor 2019 – Department Chair 2019 – Associate Professor 2014 – 2019• Yale University Associate Professor 2014 Assistant Professor 2010 – 2014• University of Wisconsin-Madison NSF Postdoctoral Fellow 2007 – 2010• Max-Planck-Institut für Mathematik, Bonn Postdoc Fellow 2006 – 2007	
VISITING POSITIONS <i>(while on sabbatical leaves)</i>	<ul style="list-style-type: none">• Institute for Advanced Study, Princeton Spring 2019, Spring 2016 von Neumann Fellow and Member• Max-Planck-Institut für Mathematik, Bonn Fall 2015, Spring 2013• Emory University Fall 2012	
GRANTS AND AWARDS	<ul style="list-style-type: none">• National Science Foundation Grant (P.I.) 2019 – 2022 DMS-1901791, \$252,174• A.M. (hon.), Amherst College 2019• Simons Fellow in Mathematics, Simons Foundation 2018 – 2019 ID 561663, \$112,155• Prose Award, Association of American Publishers 2018 Best Scholarly Book in Mathematics• National Science Foundation CAREER Grant (P.I.) 2013 – 2019 DMS-1449679 and DMS-1252815, \$437,000• Institute for Advanced Study, Princeton Spring 2019, Spring 2016 von Neumann Fellowship and Member• National Science Foundation Conference Grants (co-P.I.) DMS-1608789, \$25,000 (CT Summer School in Number Theory) 2016 DMS-1802058, \$21,000 (Automorphic Forms Workshop) 2018• Amherst College Trustee Faculty Fellowship 2015 – 2016• Yale University Junior Faculty Fellowship 2012 – 2013• National Science Foundation Grant (P.I.) 2010 – 2013 DMS-1049553, \$75,875• 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• Salutatorian, BFHS 1997	
EDITORIAL BOARDS & NATIONAL COMMITTEES	<ul style="list-style-type: none">• Editorial Board, Proceedings of the American Math. Soc. 2018 – present• Editorial Board, Journal of Number Theory, Elsevier 2017 – present• Editorial Board, Research in Number Theory, Springer 2014 – present• MAA Committee on Invited Paper Sessions 2020 – present• Book co-Editor, Springer Res. Dir. Num. Thy, Women in Numbers 4, 2017 – 2019	

57 total publications. Publications are available at:

<http://www.amherst.edu/~afolsom/AmandaFolsom/Publications.html>

I. BOOK

1. K. Bringmann, A. Folsom, K. Ono, and L. Rolin, *Harmonic Maass forms and Mock Modular Forms: Theory and Applications*, **American Math. Society Colloquium Publications**, **64**, AMS, Providence, 2018. 391 pp.

II. RESEARCH ARTICLES

2. A. Folsom, *Asymptotic expansions, partial theta functions, and radial limit differences of mock modular and modular forms*, submitted for publication. 10 pp.
3. A. Folsom, *Twisted Eisenstein series, cotangent-zeta sums, and quantum modular forms*, submitted for publication. 17 pp.
4. A. Folsom, *Quantum Jacobi forms in number theory, topology, and mathematical physics*, **Research in the Mathematical Sciences**, 6:25 (2019). 34pp.
5. A. Folsom, M-J Jang, S. Kimport, and H. Swisher, *Quantum modular forms and singular combinatorial series with repeated roots of unity*, submitted for publication. 24 pp.
6. G. Carroll, J. Corbett, A. Folsom, and E. Thieu, *Universal mock theta functions as quantum Jacobi forms*, **Research in the Mathematical Sciences** 6:6 (2019). 15 pp.
7. M. Barnett, A. Folsom, and W. Wesley, *Rank generating functions for odd-balanced unimodal sequences, quantum Jacobi forms and mock Jacobi forms*, **Journal of the Australian Mathematical Society**, accepted for publication. 21 pp.
8. A. Folsom, M-J Jang, S. Kimport, and H. Swisher, *Quantum modular forms and singular combinatorial series with distinct roots of unity*, **Springer Research Directions in Number Theory: Women in Numbers IV**, accepted for publication. 18 pp.
9. M. Barnett, A. Folsom, O. Ukogu, W.J. Wesley, and H. Xu, *Quantum Jacobi forms and balanced unimodal sequences*, **Journal of Number Theory** 186 (2018), pp. 16–34.
10. 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.
11. K. Bringmann and A. Folsom, *Quantum Jacobi forms and finite evaluations of unimodal rank generating functions*, **Archiv der Mathematik** 107 (2016), pp. 367–378.
12. A. Folsom, S. Garthwaite, S-Y Kang, H. Swisher, and S. Treneer, *Quantum mock modular forms arising from eta-theta functions*, **Research in Number Theory** 2:14 (2016), 41 pp.
13. A. Folsom, *Mock and mixed mock modular forms in the lower half-plane*, **Archiv der Mathematik** 107 (2016), pp. 487–498.
14. A. Folsom and P. Jenkins, *Zeros of modular forms of half integral weight*, **Research in Number Theory** 2:23 (2016), 25pp.
15. 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.
16. A. Folsom, Y. Homma, J. Ryu, and B. Tong, *On a general class of non-squashing partitions*, **Discrete Mathematics** 339 iss. 5 (2016), pp. 1482–1506.
17. K. Bringmann, A. Folsom, and K. Mahlburg, *Quasimodular forms and $sl(m|m)^\wedge$ characters*, **Ramanujan Journal** 36 (2015), pp. 103–116.

18. 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.
19. 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.
20. K. Bringmann, C. Calinescu, A. Folsom, and S. Kimport, *Graded dimensions of principal subspaces and modular Andrews-Gordon series*, **Communications in Contemporary Mathematics** 16 no. 4 (2014), 1350050, 20 pp.
21. 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.
22. A. Folsom, *Mock modular forms and d -distinct partitions*, **Advances in Mathematics** 254 (2014), pp. 682–705.
23. 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).
24. K. Bringmann and A. Folsom, *On a conjecture of B. Berndt and B. Kim*, **Ramanujan Journal** 32 (2013), pp. 1–4.
25. 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.
26. A. Folsom and S. Kimport, *Mock modular forms and singular combinatorial series*, **Acta Arithmetica** 159.3 (2013), pp. 257–297.
27. A. Folsom, K. Ono, and R.C. Rhoades, *Mock theta functions and quantum modular forms*, **Forum of Mathematics Pi** 1 (2013), pp. 1–27.
28. 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.
29. 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.
30. A. Folsom, Z. Kent, and K. Ono, *ℓ -adic properties of the partition function*, **Advances in Mathematics** 229 (2012), pp. 1586–1609.
31. A. Folsom, *Kac-Wakimoto characters and universal mock theta functions*, **Transactions of the American Mathematical Society** 363 no. 1 (2011), pp. 439–455.
32. A. Folsom and R. Masri, *The asymptotic distribution of traces of Maass-Poincaré series*, **Advances in Mathematics** 226 (2011), pp. 3724–3759.
33. A. Folsom, *Modular units and the q -difference equations of Selberg*, **Mathematical Research Letters** (17) no. 2 (2010), pp. 283–299.
34. A. Folsom, *Modularity and the distinct rank function*, **Ramanujan Journal** 23 (2010), pp. 183–193.
35. A. Folsom and R. Masri, *Equidistribution of Heegner points and the partition function*, **Mathematische Annalen** 348 no. 2 (2010), pp. 289–317.
36. K. Bringmann, A. Folsom, and K. Ono, *q -series and weight $3/2$ Maass forms*, **Compositio Mathematica** 145 (2009), pp. 541–552.
37. A. Folsom, *A characterization of the modular units*, **International Journal of Number Theory** (5) no. 2 (2009), pp. 303–310.
38. A. Folsom, *A short proof of the mock theta conjectures using Maass forms*, **Proceedings of the American Mathematical Society** 136 (2008), pp. 4143–4149.

39. 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.
40. 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.
41. 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.
42. A. Folsom, *Modular forms and Eisenstein’s continued fractions*, **Journal of Number Theory** 117 (2006), pp. 279–291.
43. 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 REVIEWS

44. A. Folsom and A. Kontorovich, *Advice for the campus interview*, **Notices of the American Mathematical Society**, vol. 66, no. 10, November 2019, 1651-1655.
45. A. Folsom, *Asymptotics and Ramanujan’s mock theta functions: then and now,** **Philosophical Transactions of the Royal Society A**, accepted for publication. 13 pp.
***Note.** *This article is largely expository but does contain one new result.*
46. A. Folsom and S. Payne, *Research with undergraduates*, **Notices of the American Mathematical Society**, vol. 66 no. 2, February 2019, 199-200.
47. A. Folsom, *Symmetry, almost*, **Notices of the American Mathematical Society**, vol. 66 no. 1, January 2019, 87-88.
48. A. Folsom, *Harmonic Maass forms and mock modular forms*, submitted. 8 pp.
49. A. Folsom, *False theta functions and modular forms*, submitted. 7 pp.
50. A. Folsom, *Quantum modular forms*, submitted. 5 pp.
51. A. Folsom, *A Century of Answering the Question: What Is a Mock Theta Function*, submitted. 1 pp.
52. A. Folsom, *Book Review: “My Search For Ramanujan” by K. Ono and A. Aczel*, **Bhavana** vol. 1 iss. 2., April 2017. 5 pp.
53. A. Folsom, *Perspectives on mock modular forms*, **Journal of Number Theory** 176 (2017), pp. 500-540.
54. 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.
55. A. Folsom, *WHAT IS... a mock modular form?*, **Notices of the American Mathematical Society** 57 iss. 11 (2010), pp. 1441–1443.
56. 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.

IV. BOOKS EDITED

57. *Research Directions in Number Theory: Women in Numbers IV*.
Editors: J.S. Balakrishnan, A. Folsom, M. Lalin, and M. Manes.
Association for Women in Mathematics Series, vol. 19. (Series Editor: K. Lauter.) Springer International Publishing, 2019. xix + 195pp.

SELECTED TALKS

ADDITIONAL
INVITED
RESEARCH
TALKS

1. **MAA Invited Address**, Joint National Meetings, Baltimore Jan. 2019
2. **The Royal Society, London**, Ramanujan Centenary Meeting Oct. 2018
3. **The Legacy of Ramanujan**, U. Illinois, Plenary Speaker June 2019
4. **TORAS University of Oklahoma**, Keynote Speaker Mar. 2015
5. **Yale Science and Engineering Forum**, Plenary Speaker Apr. 2012
6. **PANTS VIII**, U. South Carolina, Plenary Speaker Dec. 2008
7. **Fairfield University**, Colloquium, Nov. 2019
8. **McGill University**, Colloquium May 2019
9. **University of Pennsylvania**, Seminar April 2019
10. **Bryn Mawr and Haverford Colleges**, Colloquium Feb. 2019
11. **Institute for Advanced Study, Princeton**, Member Seminar Feb. 2019
12. **Rice University**, Colloquium Nov. 2018
13. **Boston University**, Seminar May 2017
14. **Brown University**, Seminar Feb. 2017
15. **Bucknell University**, Distinguished Visitor, Colloquium Apr. 2016
16. **Penn. State University**, Seminar Apr. 2016
17. **Institute for Advanced Study, Princeton**, Member Seminar Feb. 2016
18. **Heidelberg University, Germany**, Colloquium Dec. 2015
19. **Max-Planck-Institut, Bonn, Germany**, Seminar Dec. 2015
20. **TU Darmstadt, Germany**, Seminar Dec. 2015
21. **University College, Dublin**, Seminar Nov. 2015
22. **SUNY Albany**, Colloquium Sept. 2015
23. **University of Cologne, Germany**, Seminar Jun. 2015
24. **Temple University**, Colloquium Apr. 2015
25. **University of Massachusetts, Amherst**, Geometry Seminar Mar. 2015
26. **Tulane University**, Colloquium Jan. 2015
27. **Brandeis-Harvard-MIT-Northeastern**, Joint Colloquium Nov. 2014
28. **Amherst College**, Five College Number Theory Seminar Sept. 2014
29. **Wesleyan University**, Colloquium May 2014
30. **Texas A&M University**, Seminar Apr. 2014
31. **Yale University**, Junior Colloquium Apr. 2014
32. **Johns Hopkins University**, Colloquium Oct./Nov. 2013
33. **Heidelberg University, Germany**, Seminar May 2013
34. **Max-Planck-Institut, Bonn, Germany**, Oberseminar Apr. 2013
35. **Université de Nice, France**, Seminar Apr. 2013
36. **University College Dublin, Ireland**, Seminar Apr. 2013
37. **University of Cologne, Germany**, Seminar Apr. 2013
38. **Brigham Young University**, Colloquium Jan. 2013
39. **University of Wisconsin-Madison**, Colloquium Dec. 2012
40. **University of Illinois, Urbana-Champaign**, Seminar Oct. 2012
41. **Emory University**, Seminar Sept. 2012
42. **Northeastern University**, Seminar Apr. 2012
43. **University of Connecticut, Storrs**, Seminar Apr. 2012
44. **Yale University**, Seminar Feb. 2012
45. **Emory University**, Seminar Dec. 2011
46. **University of Massachusetts, Amherst**, Seminar Nov. 2011
47. **Northwestern University**, Seminar Apr. 2011
48. **Boston College-MIT**, Joint Seminar Feb. 2011
49. **CUNY Graduate Center**, Seminar Dec. 2010
50. **SUNY Stony Brook**, Seminar Dec. 2010
51. **University of Cologne, Germany**, Seminar Nov. 2010
52. **MIT**, ∞ -dim'l Lie Algebras Seminar Oct. 2010
53. **Wesleyan University**, Colloquium Oct. 2010
54. **Yale University**, Arithmetic Geometry Seminar Sept. 2010
55. **Yale University**, Colloquium Feb. 2010
56. **University of Pittsburgh**, Colloquium Jan. 2010
57. **University of Texas, Austin**, Seminar Jan. 2010

58. POSTECH, Pohang, Korea , Seminar	Dec. 2009
59. Rutgers University , Colloquium	Dec. 2009
60. Rice University , Colloquium	Nov. 2009
61. University of Wisconsin-Madison , Seminar	Sept. 2009
62. University of Wisconsin-Madison , Seminar	Nov. 2008
63. University College Dublin , Seminar	Feb. 2008
64. McMaster University, Canada , Arith. Geometry Seminar	Nov. 2007
65. Stanford University , Seminar	Nov. 2007
66. University of South Carolina , Seminar	Nov. 2007
67. University of Illinois, Urbana-Champaign , Seminar	Oct. 2007
68. University of Wisconsin-Madison , Seminar	Oct. 2007
69. Amherst College , Five College Number Theory Seminar	May 2007
70. University of Wisconsin-Madison , Seminar	May 2007
71. ETH Zurich, Switzerland , Seminar	Dec. 2006
72. Max-Planck-Institut, Bonn, Germany , Seminar	Sept. 2006
73. Princeton University , Seminar	May 2006
74. University of California, Los Angeles , Seminar	Feb. 2006
75. Boston University , Algebra Seminar	Nov. 2005
76. University of Wisconsin-Madison , Seminar	Feb. 2005
77. Harvard University , Graduate Student Seminar	Jul. 2004

CONFERENCE
AND
WORKSHOP
TALKS

78. 100 Years of Mock Theta Functions, Vanderbilt	May 2020
79. AMS-MAA Joint Meetings, Denver , special session	Jan. 2020
80. Arithmetic, geometry and modular forms, ETH Zurich	Jun. 2019
81. Hawaii Number Theory Conference (HINT)	Mar. 2019
82. AMS Western Sectional, U. Hawaii , special session	Mar. 2019
83. Modularity and 3-manifolds, ICERM (Brown)	Mar. 2019
84. Connecticut Summer School in Number Theory, UConn	May 2018
85. Modular Forms and Quantum Knots, BIRS, Banff	Mar. 2018
86. AMS-MAA Joint Meetings, San Diego special session	Jan. 2018
87. AMS Eastern Sectional, Hunter College , closing speaker	May 2017
88. Connecticut Summer School in Number Theory, UConn	Aug. 2016
89. Gainesville Number Theory Conference, UFlorida	Mar. 2016
90. Illinois Number Theory Conference, UIUC	Aug. 2015
91. Assoc. Women in Math. Research Symposium, UMaryland	Apr. 2015
92. AMS-MAA Joint Meetings, San Antonio , special session	Jan. 2015
93. Southern California Number Theory Day, UC-Irvine	Oct. 2014
94. AMS Eastern Sectional, Temple University , special session	Oct. 2013
95. Ramanujan 125, University of Florida	Nov. 2012
96. University of Illinois Number Theory Conference	Oct. 2012
97. Building Bridges: EU-US Conf., Aachen Uni., Germany	Aug. 2012
98. Krupp Symposium, University of Cologne, Germany	Feb. 2012
99. AMS-MAA Joint Meetings, Boston , special session	Jan. 2012
100. Quebec-Maine Number Theory Conference	Oct. 2011
101. CUNY Conference on Symmetric Groups	Sept. 2011
102. AMS Eastern Spring Sectional, Holy Cross , special session	Apr. 2011
103. ICTP Conference on Mock Modular Forms, Trieste, Italy	Mar. 2011
104. AMS-MAA Joint Meetings, New Orleans , special session	Jan. 2011
105. AMS-CMS Joint Meeting, Pucon, Chile	Dec. 2010
106. University of Hawaii Workshop on Automorphic Forms	Mar. 2010
107. KMS-AMS Winter Meeting, Seoul, Korea	Dec. 2009
108. Mock ϑ-functions and Applications, MPIM Bonn, Germany	May 2009
109. 1047th Meeting of the AMS, UIUC	Mar. 2009
110. University of Florida Conference on Quadratic Forms	Mar. 2009
111. University of Hawaii Workshop on Automorphic Forms	May 2008
112. University of Florida Number Theory Conference	Mar. 2008
113. AMS-MAA Joint Meetings, San Diego , special session	Jan. 2008
114. SASTRA-Ramanujan Conference, Kumbakonam, India	Dec. 2007

115. **The Fields Institute Workshop** Nov. 2007
116. **Heini Halberstam's 80th Birthday Conference**, UIUC May 2007
117. **21st Automorphic Forms Workshop**, UC-Santa Barbara Mar. 2007
118. **Jahrestagung der DMV**, Uni. Bonn, Germany Sept. 2006
119. **20th Automorphic Forms Workshop**, UC-Boulder Mar. 2006
120. **19th Automorphic Forms Workshop**, U. North Texas Mar. 2005
121. **18th Automorphic Forms Workshop**, UC-Santa Barbara Mar. 2004
122. **Summer School in Analytic Num. Theory**, Catalina, CA Aug. 2003
123. **AMS-MAA Joint Meetings, New Orleans**, undergrad. prize Jan. 2001
124. **MAA Regional Meeting**, St. Paul's School, NH Jun. 2000

OTHER
CONFERENCES
AND MEETINGS

1. **Math. Forschungsinstitut Oberwolfach (MFO)** Aug/Sep 2020
2. **Simons Foundation, MPS Annual Meeting, NYC** Oct. 2018
3. **AMS-MAA Joint Meetings, Atlanta** Jan. 2017
4. **MAA Mathfest, Washington D.C.** Aug. 2015
5. **AIM SQuaREs Workshop** Jul. 2015
6. **REU Mini-Symposium at UConn** Jul. 2015
7. **University of Cologne, research visits** 5/2011, 11/2011, 5/2012, 6/2015
8. **Automorphic Forms Conf., CIRM Luminy, France** May 2015
9. **MAA Mathfest, Portland, OR** Aug. 2014
10. **REU Mini-Symposium at Yale** Jul. 2014
11. **AMS-MAA Joint Meetings, Baltimore** Jan. 2014
12. **Simons Center Workshop: Mock/Moonshine/String** Aug. 2013
13. **Mount Holyoke College, New Directions for REUs** Jun. 2013
14. **Hypergeometric Series, Institut Henri Poincaré, Paris** May 2012
15. **AIM Workshop on Cohen-Lenstra Heuristics** Jun. 2011
16. **University College Dublin, research visit** May 2011
17. **Emory University Conference on Partitions** Jan. 2011
18. **AIM Workshop on Mock Modular Forms** Mar. 2010
19. **AMS-MAA Joint National Meetings, San Francisco** Jan. 2010
20. **Columbia U., D. Goldfeld's 60th Bday Conference** May 2007
21. **Oxford Club NYC: Wiles/Du Sautoy** (guest of F.H. Schott) Apr. 2007
22. **Conf. on Modular/Diophantine, MPIM Bonn, Germany** Feb. 2007
23. **Universiteit Leiden, Netherlands, Intercity Num. Th.** Sept. 2006
24. **Columbia University, Galois Repns./L-fns./Arithmetic** Jun. 2006
25. **Princeton/IAS Zeta Functions Women's Program** May 2006
26. **AMS-MAA Joint National Meetings, San Antonio** Jan. 2006
27. **Southern California Number Theory Day, UC-Irvine** Oct. 2005
28. **Gauss-Dirichlet Conference, Göttingen, Germany** Jun. 2005
29. **Southern California Number Theory Day, UCSD** May 2005
30. **University of Florida, Additive Number Theory** Nov. 2004

PH.D. STUDENT · S. Kimport (Yale University, '15), *Quantum modular forms, mock modular forms, and partial theta functions*. First Job: Stanford University, Lecturer

UNDERGRAD. THESIS STUDENTS · Justin Warring (Amherst, '20), *in-progress*.
 · William (Jack) Wesley (Amherst, '18), *Combinatorial Proofs of Ramanujan's Congruences*. Co-recipient, Breusch Prize in Mathematics, Summa Cum Laude.
 · Yen Nhi Truong Vu (Amherst, '17), *On the Modular Transformations and Asymptotic Behaviors of Mock Modular Forms*. Recipient, Breusch Prize in Mathematics, Summa Cum Laude.
 · Edward Kim (Amherst, '15), *An Application of the Circle Method in Analytic Number Theory to the Partition Function*. Co-recipient, Breusch Prize in Mathematics, Summa Cum Laude.

UNDERGRAD. RESEARCH ADVISED	<ul style="list-style-type: none"> • Summer 2018 (Amherst): G. Carroll '20, J. Corbett '19, A. Folsom, and E. Thieu '19, <i>Universal mock theta functions as quantum Jacobi forms</i>, Research in the Mathematical Sciences, 6:6 (2019). 15pp. • 2017–18 (Amherst): M. Barnett '18, A. Folsom, and W. Wesley '18, <i>Rank generating functions for odd-balanced unimodal sequences, quantum Jacobi forms and mock Jacobi forms</i>, Journal of the Australian Mathematical Society, accepted for publication. 16 pp. • Summer 2017 (Amherst): M. Barnett '18, A. Folsom, O. Ukogu '18, W. Wesley '18, and H. Xu '18, <i>Quantum Jacobi forms and balanced unimodal sequences</i>, Journal of Number Theory 186 (2018), pp. 16-34. • Summer 2015 (Amherst): A. Folsom, C. Ki '17, Y.N. Truong Vu '17, and B. Yang '18, <i>Strange combinatorial quantum modular forms</i>, Journal of Number Theory 170 (2017), pp. 315-346. • Summer 2014 (Yale): co-founder/director of math. research program SUMRY with S. Payne, and research project advisor. A. Folsom, Y. Homma '16, J.H. Ryu '16, and B. Tong '17, <i>On a general class of non-squashing partitions</i>, Discrete Math, 229 (2016), 25pp. • Summers 2007– 2010 (University of Wisconsin-Madison): NSF REU Instructor, P.I. Ken Ono. Advised/co-advised small groups of undergrads. from various U.S. institutions on original number theory research. 18 student papers submitted.
OTHER ADVISING	<ul style="list-style-type: none"> • Women in Numbers 4, Research Project Advisor, BIRS Banff Aug. 2017 – 2019 • Mentor, Association for Women in Math. Mentor Network 2015 – present • Mentor, MAA Project NExT 2017 – present • Course & Research Assistant, Arizona Winter School March 2013
CONFERENCES ORGANIZED	<ul style="list-style-type: none"> • AMS-MAA Joint Meetings, AMS special session, Denver Jan. 2020 • AMS Spring Central/Western Joint Sectional Meeting, U. Hawaii March 2019 • AMS-MAA Joint Meetings, MAA special session, Baltimore Jan. 2019 • 32nd Automorphic Forms Workshop, Tufts, NSF funded (co-P.I.) March 2018 • CTNT Summer School & Research Conference, NSF funded (co-P.I.) Aug. 2016 • REU Mini-Symposium at Yale University Jul. 2014 • AMS Fall Sectional Meeting, special session, U. Arizona Oct. 2012 • AMS-MAA Joint Meetings, special session, AMS Washington D.C. Jan. 2009
TEACHING EXPERIENCE	<p>Amherst College (2014–present)</p> <ul style="list-style-type: none"> • Math 111: Introduction to the Calculus F14, S15, S17, F17, S18, S20 • Math 225: Fractal Geometry F14, F16, F19 • Math 281: Combinatorics* F17 • Math 310: Introduction to the Theory of Partitions* F16 • Math 350: Groups, Rings and Fields (Abstract Algebra) S15 • Math 460: Analytic Number Theory* S18 <p>Yale University (2010–2014)</p> <ul style="list-style-type: none"> • Math 112a: Calculus of Functions of One Variable F11, Su13 • Math 222a: Linear Algebra with Applications F13 • Math 290b: Fractal Geometry S12, S14 • Math 354b: Number Theory S12 • Math 355b: Geometric Algebra S11 • Math 632a: Graduate Modular Forms* F10 • Math 634b: Graduate Harmonic Maas Forms* S14 • Seminar: Lang Lunch Graduate Teaching Seminar Instructor S12 <p>University of Wisconsin, Madison (2008–2010)</p> <ul style="list-style-type: none"> • Math 320: Linear Algebra and Diff. Eq. F09, S10 • Math 421: The Theory of Calculus S09 • Math 748: Graduate Algebraic Number Theory F08

University of California, Los Angeles (2002-2004)

- T.A. for Calculus, Honors Calculus, Diff. Eq., Linear Alg. 2002–04
- PEERS Calculus for underrepresented minority students 2003–04

**introduced to the College/University curriculum*

DEPARTMENT AND COLLEGE SERVICE

Amherst College

- Department Chair, Mathematics & Statistics 2019–present
- Faculty Committee on Admission and Financial Aid (FCAFA) 2016–18
- Ad-Hoc Faculty Committee on Athletics 2016–18
- New Student Orientation Advisor Summers 2016, 2017
- Mathematics Comprehensive Exam Co-Organizer/Advisor 2016–18
- Honors Thesis Advisor (3 students) 2014–present
- Mathematics Major Advisor 2014–present
- 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

FUNDING ADVISORY PANELS

- **National Science Foundation**, Grant Panels
- **National Security Agency**, Grant Panels

PUBLIC OR STUDENT EVENTS AND PANELS

- **AWM/Spectra, JMM Denver**, queer families in academia panelist Jan. 2020
- **College of the Holy Cross**, PME undergrad. colloquium May 2017
- **Queer Resource Ctr.**, Amherst Coll., documentary interview Jun. 2015
- **Queer Resource Ctr.**, Amherst Coll., faculty-student panel Apr. 2015
- **Women's & Gender Ctr.** Amherst Coll., faculty-student panel Oct. 2014
- **Center for Women in Math.**, Smith Coll., undergrad. lecture Oct. 2014
- **Yale Math Club (YUMS)**, undergraduate lecture Apr. 2014
- **Amherst College**, undergrad lecture Jan. 2014
- **Yale University Math Mornings**, public lecture Nov. 2013
- **Center for Women in Math.**, Smith Coll., undergrad. lecture Nov. 2012
- **Emory U.**, Environmental Sci. 120, undergraduate lecture Oct. 2012
- **UConn**, Preparing Future Faculty, panelist Apr. 2012
- **Naugatuck Valley Comm. Coll.**, Women in Science speaker Mar. 2012
- **Yale Math Club (YUMS)**, undergraduate lecture Sept. 2011
- **Tilde Cafe, Branford, CT**, public lecture/local TV Mar. 2011
- **MAA Joint Meetings, New Orleans**, undergraduate lecture Jan. 2011
- **MIT: Women in Mathematics Lectures** Oct. 2010
- **UW-Madison Math Club**, undergraduate lecture Apr. 2009
- **Amherst College**, undergraduate lecture Nov. 2005

PUBLIC SCHOOL **EYE on Mathematics: Edgewood-Yale Educational Outreach** 2012–15
OUTREACH
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.

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.

— last updated January 3, 2020 —