

AMANDA L. FOLSOM

CONTACT INFORMATION	Amherst College Department of Mathematics and Statistics Amherst, MA 01002	https://afolsom.people.amherst.edu afolsom@amherst.edu
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 Jun. 2006 <i>Advisor: William D. Duke</i> 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 Bicentennial Professor 2022 – present Full Professor 2019 – present Department Chair 2019 – 2021 and F2023 Department Associate Chair S2024 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 2006 – 2007 	
VISITING POSITIONS <i>(most 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, Bonn Summer 2022, Fall 2015, Spring 2013 Visiting Scientist • Emory University Fall 2012 	
GRANTS AND AWARDS	<ul style="list-style-type: none"> • National Science Foundation Grant (P.I.) 2022 – 2025 DMS-2200728, \$273,250 • AMS Mary P. Dolciani Prize for Excellence in Research 2021 • 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

- **Proceedings of the Amer. Math. Soc.** (AMS)
 - Coordinating Editor in Algebra, Number Theory, and Logic 2021 – present
 - Editorial Board Member 2018 – present
- **La Matematica, Assoc. for Women in Math.** (Springer)
 - Editorial Board Member 2021 – present
- **Journal of Number Theory** (Elsevier)
 - Associate Editor 2017 – present
- **Research in Number Theory** (Springer)
 - Editorial Board Member 2014 – present
- **Ramanujan Journal** (Springer)
 - Editorial Board Member 2021 – present
- **Involve** (MSP)
 - Editorial Board Member 2021 – present
- **Essential Number Theory** (MSP)
 - Editorial Board Member 2021 – present
- **Research Directions in Number Thy., Women in Numbers 4**
 - Co-Editor (Springer-AWM book volume) 2017 – 2019

PROFESSIONAL COMMITTEES

- **American Mathematical Society**
 - AMS Committee on Meetings and Conferences 2024 – present
- **American Mathematical Society - Simons Foundation**
 - AMS-Simons Research Enhancement Grants for PUI Faculty Committee 2023 – present
- **American Mathematical Society**
 - AMS Levi L. Conant Prize Committee 2023 – present
- **American Mathematical Society**
 - AMS Mary P. Dolciani Prize for Excellence in Research Committee 2022 – present
- **Mathematical Association of America**
 - MAA Committee on Invited Paper Sessions 2020 – present

PUBLICATIONS

69⁺ total publications. Publications are available at:
<https://afolsom.people.amherst.edu/Publications.html>

I. BOOK

1. K. Bringmann, A. Folsom, K. Ono, and L. Rolén, *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 and D. Metacarpa, *Quantum q -series and mock theta functions*, submitted 2023. 21 pp.
3. A. Folsom, J. Males, L. Rolén, and M. Storzer, *Oscillating asymptotics for a Nahm-type sum and conjectures of Andrews*, submitted 2023. 31 pp.
4. C. Ballantine, H. Burson, W. Craig, A. Folsom, and B. Wen, *Hook length biases and general linear partition inequalities*, **Research in the Mathematical Sciences**, accepted for publication 2023. 36 pp.
5. A. Folsom, *Periodic partial theta functions and q -hypergeometric knot multi sums as quantum Jacobi forms*, **Journal of Mathematical Analysis and Applications**, accepted for publication 2023. 27pp.
6. A. Folsom, J. Males, and L. Rolén, *Equidistribution and partition polynomials*, **Ramanujan Journal**, accepted for publication 2023. 15pp.
7. C. Ballantine, H. Burson, W. Craig, A. Folsom, and B. Wen, *On the Number of Hooks of Fixed Length in Odd versus Distinct Partitions*, **Seminaire Lotharingien de Combinatoire**, Proceedings of the 35th International Conference on Formal Power Series and Algebraic Combinatorics, accepted for publication 2023. 12 pp.
8. C. Ballantine and A. Folsom, *On the number of parts in all partitions enumerated by the Rogers-Ramanujan identities*, **Fields Institute Symposium on Number Theory**, Proceedings Subbarao Centenary, accepted for publication 2023. 16pp.
9. C. Ballantine, H. Burson, A. Folsom, C-Y Hsu, I. Negrini, and B. Wen, *Mock theta functions and related combinatorics*, **Springer Research Directions in Number Theory: Women in Numbers V**. Association for Women in Mathematics Series, accepted for publication 2023. 28pp.

10. A. M. Dietrich, A. Folsom, K. Ng, C. Stewart, and S. Xu, *Overpartition ranks and quantum modular forms*, **Research in Number Theory** 8:45 (2022). 16pp.
11. C. Ballantine, H. Burson, A. Folsom, C-Y Hsu, I. Negrini, and B. Wen, *On a Partition Identity of Lehmer*, **Discrete Mathematics** 345 (2022). 26pp.
12. A. Folsom, E. Pratt, N. Solomon, and A.R. Tawfeek, *Quantum Jacobi forms and sums of tails identities*, **Research in Number Theory** 8:8 (2022). 24pp.
13. A. Folsom, *Asymptotic expansions, partial theta functions, and radial limit differences of mock modular and modular forms*, **International Journal of Number Theory** Vol. 17, No. 2 (2021) 425–434.
14. A. Folsom, *Twisted Eisenstein series, cotangent-zeta sums, and quantum modular forms*, **Transactions of the London Mathematical Society**, 7(1) (2020), pp. 33–48.
15. A. Folsom, M-J Jang, S. Kimport, and H. Swisher, *Quantum modular forms and singular combinatorial series with repeated roots of unity*, **Acta Arithmetica**, 194.4 (2020), pp. 393–421.
16. 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** 109 (2020), 157–175.
17. A. Folsom, *Quantum Jacobi forms in number theory, topology, and mathematical physics*, **Research in the Mathematical Sciences**, 6:25 (2019). 34pp.
18. 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.
19. 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**. Association for Women in Mathematics Series, vol. 19. Springer, (2019). pp. 173–195.
20. 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.
21. 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.
22. 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.
23. K. Bringmann and A. Folsom, *Quantum Jacobi forms and finite evaluations of unimodal rank generating functions*, **Archiv der Mathematik** 107 (2016), pp. 367–378.
24. 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.
25. A. Folsom, *Mock and mixed mock modular forms in the lower half-plane*, **Archiv der Mathematik** 107 (2016), pp. 487–498.
26. A. Folsom and P. Jenkins, *Zeros of modular forms of half integral weight*, **Research in Number Theory** 2:23 (2016), 25pp.
27. 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.
28. K. Bringmann, A. Folsom, and K. Mahlburg, *Quasimodular forms and $sl(m|m)^\wedge$ characters*, **Ramanujan Journal** 36 (2015), pp. 103–116.
29. 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.
30. 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.
31. 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.

32. 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.
33. A. Folsom, *Mock modular forms and d -distinct partitions*, **Advances in Mathematics** 254 (2014), pp. 682–705.
34. 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).
35. K. Bringmann and A. Folsom, *On a conjecture of B. Berndt and B. Kim*, **Ramanujan Journal** 32 (2013), pp. 1–4.
36. 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.
37. A. Folsom and S. Kimport, *Mock modular forms and singular combinatorial series*, **Acta Arithmetica** 159.3 (2013), pp. 257–297.
38. A. Folsom, K. Ono, and R.C. Rhoades, *Mock theta functions and quantum modular forms*, **Forum of Mathematics Pi** 1 (2013), pp. 1–27.
39. 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.
40. 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.
41. A. Folsom, Z. Kent, and K. Ono, *ℓ -adic properties of the partition function*, **Advances in Mathematics** 229 (2012), pp. 1586–1609.
42. A. Folsom, *Kac-Wakimoto characters and universal mock theta functions*, **Transactions of the American Mathematical Society** 363 no. 1 (2011), pp. 439–455.
43. A. Folsom and R. Masri, *The asymptotic distribution of traces of Maass-Poincaré series*, **Advances in Mathematics** 226 (2011), pp. 3724–3759.
44. A. Folsom, *Modular units and the q -difference equations of Selberg*, **Mathematical Research Letters** (17) no. 2 (2010), pp. 283–299.
45. A. Folsom, *Modularity and the distinct rank function*, **Ramanujan Journal** 23 (2010), pp. 183–193.
46. A. Folsom and R. Masri, *Equidistribution of Heegner points and the partition function*, **Mathematische Annalen** 348 no. 2 (2010), pp. 289–317.
47. K. Bringmann, A. Folsom, and K. Ono, *q -series and weight $3/2$ Maass forms*, **Compositio Mathematica** 145 (2009), pp. 541–552.
48. A. Folsom, *A characterization of the modular units*, **International Journal of Number Theory** (5) no. 2 (2009), pp. 303–310.
49. A. Folsom, *A short proof of the mock theta conjectures using Maass forms*, **Proceedings of the American Mathematical Society** 136 (2008), pp. 4143–4149.
50. 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.
51. 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.
52. 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.
53. A. Folsom, *Modular forms and Eisenstein's continued fractions*, **Journal of Number Theory** 117 (2006), pp. 279–291.
54. 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

55. R. Buckmire, A. Folsom, C. Goff, A. Hoover, J. Nakao, and K.A. Sather-Wagstaff, *On Best Practices for the Recruitment, Retention, and Flourishing of LGBTQ+ Mathematicians*, **Notices of the American Mathematical Society**, vol. 70, no. 6, June/July 2023, 979–985.

56. A. Folsom and A. Kontorovich, *Advice for the campus interview*, **Notices of the American Mathematical Society**, vol. 66, no. 10, November 2019, 1651-1655.
57. A. Folsom, *Asymptotics and Ramanujan's mock theta functions: then and now*,* **Philosophical Transactions of the Royal Society A**, 378 no. 2163, (2020). 13 pp.
***Note.** *This article is largely expository but does contain one new result.*
58. A. Folsom and S. Payne, *Research with undergraduates*, **Notices of the American Mathematical Society**, vol. 66 no. 2, February 2019, 199-200.
59. A. Folsom, *Symmetry, almost*, **Notices of the American Mathematical Society**, vol. 66 no. 1, January 2019, 87-88.
60. A. Folsom, *Harmonic Maass forms and mock modular forms*, submitted. 8 pp.
61. A. Folsom, *False theta functions and modular forms*, submitted. 7 pp.
62. A. Folsom, *Quantum modular forms*, submitted. 5 pp.
63. A. Folsom, *A Century of Answering the Question: What Is a Mock Theta Function*, submitted. 1 pp.
64. H-C Chan and A. Folsom, *Evaluations of the Rogers-Ramanujan Continued Fraction*, submitted. 7 pp.
65. A. Folsom, *Book Review: "My Search For Ramanujan" by K. Ono and A. Aczel*, **Bhavana** vol. 1 iss. 2., April 2017. 5 pp.
66. A. Folsom, *Perspectives on mock modular forms*, **Journal of Number Theory** 176 (2017), pp. 500-540.
67. 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.
68. A. Folsom, *WHAT IS... a mock modular form?*, **Notices of the American Mathematical Society** 57 iss. 11 (2010), pp. 1441-1443.
69. 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

70. *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 INVITED TALKS

- | | |
|---|------------|
| 1. The Legacy of Ramanujan, Penn State , Plenary Speaker | June 2024 |
| 2. Dresden Lectures, Swarthmore College , Invited Lectures | Oct. 2022 |
| 3. Oliver Lecturer & Class of 1960 Speaker, Williams College | Sept. 2022 |
| 4. MAA Invited Address , Joint National Meetings, Baltimore | Jan. 2019 |
| 5. The Royal Society, London , Ramanujan Centenary Meeting | Oct. 2018 |
| 6. The Legacy of Ramanujan, U. Illinois , Plenary Speaker | June 2019 |
| 7. TORAS University of Oklahoma , Keynote Speaker | Mar. 2015 |
| 8. Yale Science and Engineering Forum , Plenary Speaker | Apr. 2012 |
| 9. PANTS VIII, U. South Carolina , Plenary Speaker | Dec. 2008 |

ADDITIONAL INVITED RESEARCH TALKS

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|---|-----------|
| 10. Northeastern University , Graduate Student Seminar | Oct. 2022 |
| 11. University of Virginia , REU Colloquium | July 2022 |
| 12. TU-Darmstadt, Germany , Seminar (Zoom) | Apr. 2021 |
| 13. City College of New York , Colloquium (Zoom) | Apr. 2021 |
| 14. Vanderbilt University , Seminar (Zoom) | Dec. 2020 |
| 15. UCLA , Seminar (Zoom) | Dec. 2020 |
| 16. University of Bristol, UK , Seminar (Zoom) | Dec. 2020 |

17. St. Petersburg State University, Russia , Seminar (Zoom)	Dec. 2020
18. Fairfield University , Colloquium	Nov. 2019
19. McGill University , Colloquium	May 2019
20. University of Pennsylvania , Seminar	April 2019
21. Bryn Mawr and Haverford Colleges , Colloquium	Feb. 2019
22. Institute for Advanced Study, Princeton , Member Seminar	Feb. 2019
23. Rice University , Colloquium	Nov. 2018
24. Boston University , Seminar	May 2017
25. Brown University , Seminar	Feb. 2017
26. Bucknell University , Distinguished Visitor, Colloquium	Apr. 2016
27. Penn. State University , Seminar	Apr. 2016
28. Institute for Advanced Study, Princeton , Member Seminar	Feb. 2016
29. Heidelberg University, Germany , Colloquium	Dec. 2015
30. Max-Planck-Institut, Bonn, Germany , Seminar	Dec. 2015
31. TU Darmstadt, Germany , Seminar	Dec. 2015
32. University College, Dublin , Seminar	Nov. 2015
33. SUNY Albany , Colloquium	Sept. 2015
34. University of Cologne, Germany , Seminar	Jun. 2015
35. Temple University , Colloquium	Apr. 2015
36. University of Massachusetts, Amherst , Geometry Seminar	Mar. 2015
37. Tulane University , Colloquium	Jan. 2015
38. Brandeis-Harvard-MIT-Northeastern , Joint Colloquium	Nov. 2014
39. Amherst College , Five College Number Theory Seminar	Sept. 2014
40. Wesleyan University , Colloquium	May 2014
41. Texas A&M University , Seminar	Apr. 2014
42. Yale University , Junior Colloquium	Apr. 2014
43. Johns Hopkins University , Colloquium	Oct./Nov. 2013
44. Heidelberg University, Germany , Seminar	May 2013
45. Max-Planck-Institut, Bonn, Germany , Oberseminar	Apr. 2013
46. Université de Nice, France , Seminar	Apr. 2013
47. University College Dublin, Ireland , Seminar	Apr. 2013
48. University of Cologne, Germany , Seminar	Apr. 2013
49. Brigham Young University , Colloquium	Jan. 2013
50. University of Wisconsin-Madison , Colloquium	Dec. 2012
51. University of Illinois, Urbana-Champaign , Seminar	Oct. 2012
52. Emory University , Seminar	Sept. 2012
53. Northeastern University , Seminar	Apr. 2012
54. University of Connecticut, Storrs , Seminar	Apr. 2012
55. Yale University , Seminar	Feb. 2012
56. Emory University , Seminar	Dec. 2011
57. University of Massachusetts, Amherst , Seminar	Nov. 2011
58. Northwestern University , Seminar	Apr. 2011
59. Boston College-MIT , Joint Seminar	Feb. 2011
60. CUNY Graduate Center , Seminar	Dec. 2010
61. SUNY Stony Brook , Seminar	Dec. 2010
62. University of Cologne, Germany , Seminar	Nov. 2010
63. MIT , ∞ -dim'l Lie Algebras Seminar	Oct. 2010
64. Wesleyan University , Colloquium	Oct. 2010
65. Yale University , Arithmetic Geometry Seminar	Sept. 2010
66. Yale University , Colloquium	Feb. 2010
67. University of Pittsburgh , Colloquium	Jan. 2010
68. University of Texas, Austin , Seminar	Jan. 2010
69. POSTECH, Pohang, Korea , Seminar	Dec. 2009
70. Rutgers University , Colloquium	Dec. 2009
71. Rice University , Colloquium	Nov. 2009
72. University of Wisconsin-Madison , Seminar	Sept. 2009
73. University of Wisconsin-Madison , Seminar	Nov. 2008
74. University College Dublin , Seminar	Feb. 2008
75. McMaster University, Canada , Arith. Geometry Seminar	Nov. 2007
76. Stanford University , Seminar	Nov. 2007
77. University of South Carolina , Seminar	Nov. 2007
78. University of Illinois, Urbana-Champaign , Seminar	Oct. 2007
79. University of Wisconsin-Madison , Seminar	Oct. 2007
80. Amherst College , Five College Number Theory Seminar	May 2007
81. University of Wisconsin-Madison , Seminar	May 2007
82. ETH Zurich, Switzerland , Seminar	Dec. 2006
83. Max-Planck-Institut, Bonn, Germany , Seminar	Sept. 2006
84. Princeton University , Seminar	May 2006
85. University of California, Los Angeles , Seminar	Feb. 2006
86. Boston University , Algebra Seminar	Nov. 2005
87. University of Wisconsin-Madison , Seminar	Feb. 2005
88. Harvard University , Graduate Student Seminar	Jul. 2004

INVITED
CONFERENCE
AND WORKSHOP
TALKS

89. Int'l Conference on Modular Forms & q -series, U. Cologne	Mar. 2024
90. Clifford Lectures Symposium, Tulane U.	Feb. 2024
91. Assoc. for Women in Math. Research Symposium, Atlanta	Oct. 2023
92. New Conn. Between Physics & Number Thy., Pollica, Italy	Jun. 2023
93. Joint Math. Meetings, Boston, special sessions (2 talks)	Jan. 2023
94. Spec(\bar{Q}), Fields Institute, Toronto	July 2022
95. 100 years of mock theta functions, Vanderbilt,	May 2022
96. AMS Western Sectional, U. Denver, special session	May 2022
97. Joint Math. Meetings, Seattle, special sessions (2 talks)	April 2022
98. LGBTQ+ Math Day, Fields Institute, keynote speaker	Nov. 2021
99. Subbarao Centenary Symposium, IISER, India (virtual)	July 2021
100. New Conn. Num. Thy./Phys., INI Cambridge, UK (Zoom)	May 2021
101. KITP Modularity in Quantum Systems, (Zoom)	Oct. 2020
102. Central U. of Himachal Pradesh, India, (Zoom)	Sept. 2020
103. 100 Years of Mock Theta Functions, Vanderbilt	May 2020*
104. AMS Graduate Conference (Brown), keynote speaker	April 2020*
105. AMS-MAA Joint Meetings, Denver, special session	Jan. 2020
106. Arithmetic, geometry and modular forms, ETH Zurich	Jun. 2019
107. Hawaii Number Theory Conference (HINT)	Mar. 2019
108. AMS Western Sectional, U. Hawaii, special session	Mar. 2019
109. Modularity and 3-manifolds, ICERM (Brown)	Mar. 2019
110. Connecticut Summer School in Number Theory, UConn	May 2018
111. Modular Forms and Quantum Knots, BIRS, Banff	Mar. 2018
112. AMS-MAA Joint Meetings, San Diego special session	Jan. 2018
113. AMS Eastern Sectional, Hunter College, closing speaker	May 2017
114. Connecticut Summer School in Number Theory, UConn	Aug. 2016
115. Gainesville Number Theory Conference, UFlorida	Mar. 2016
116. Illinois Number Theory Conference, UIUC	Aug. 2015
117. Assoc. Women in Math. Research Symposium, UMaryland	Apr. 2015
118. AMS-MAA Joint Meetings, San Antonio, special session	Jan. 2015
119. Southern California Number Theory Day, UC-Irvine	Oct. 2014
120. AMS Eastern Sectional, Temple University, special session	Oct. 2013
121. Ramanujan 125, University of Florida	Nov. 2012
122. University of Illinois Number Theory Conference	Oct. 2012
123. Building Bridges: EU-US Conf., Aachen Uni., Germany	Aug. 2012
124. Krupp Symposium, University of Cologne, Germany	Feb. 2012
125. AMS-MAA Joint Meetings, Boston, special session	Jan. 2012
126. Quebec-Maine Number Theory Conference	Oct. 2011
127. CUNY Conference on Symmetric Groups	Sept. 2011
128. AMS Eastern Spring Sectional, Holy Cross, special session	Apr. 2011
129. ICTP Conference on Mock Modular Forms, Trieste, Italy	Mar. 2011
130. AMS-MAA Joint Meetings, New Orleans, special session	Jan. 2011
131. AMS-CMS Joint Meeting, Pucon, Chile	Dec. 2010
132. University of Hawaii Workshop on Automorphic Forms	Mar. 2010
133. KMS-AMS Winter Meeting, Seoul, Korea	Dec. 2009
134. Mock ϑ -functions and Applications, MPIM Bonn, Germany	May 2009
135. 1047th Meeting of the AMS, UIUC	Mar. 2009
136. University of Florida Conference on Quadratic Forms	Mar. 2009
137. University of Hawaii Workshop on Automorphic Forms	May 2008
138. University of Florida Number Theory Conference	Mar. 2008
139. AMS-MAA Joint Meetings, San Diego, special session	Jan. 2008
140. SASTRA-Ramanujan Conference, Kumbakonam, India	Dec. 2007
141. The Fields Institute Workshop	Nov. 2007
142. Heini Halberstam's 80th Birthday Conference, UIUC	May 2007
143. 21 st Automorphic Forms Workshop, UC-Santa Barbara	Mar. 2007
144. Jahrestagung der DMV, Uni. Bonn, Germany	Sept. 2006
145. 20 th Automorphic Forms Workshop, UC-Boulder	Mar. 2006
146. 19 th Automorphic Forms Workshop, U. North Texas	Mar. 2005
147. 18 th Automorphic Forms Workshop, UC-Santa Barbara	Mar. 2004
148. Summer School in Analytic Num. Theory, Catalina, CA	Aug. 2003
149. AMS-MAA Joint Meetings, New Orleans, undergrad. prize	Jan. 2001
150. MAA Regional Meeting, St. Paul's School, NH	Jun. 2000

OTHER
CONFERENCES
AND MEETINGS

1. Joint Mathematics Meetings, San Francisco, CA	January 2024
2. MAA Mathfest, Tampa, FL	August 2023
3. Ramanujan and Euler (Zoom)	July 2022
4. MAA Mathfest (virtual program)	August 2021
5. REU Mini-Symposium at UConn (Zoom)	July 2021
6. QTMC 2021, Fields Institute (virtual)	June 2021
7. AMS-MAA Joint Meetings (virtual program)	January 2021

**Event or travel canceled or postponed due to Covid-19.*

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

PH.D. STUDENT	<ul style="list-style-type: none"> • S. Kimport (Yale University, '15), <i>Quantum modular forms, mock modular forms, and partial theta functions</i>. First Job: Stanford University, Lecturer
UNDERGRAD. THESIS STUDENTS	<ul style="list-style-type: none"> • Kathy Xing (Amherst, '24), <i>thesis in-progress</i>. • Thomas Meyer (Amherst, '23), <i>Resolution of the Alder-Andrews Conjecture</i>. • Justin Warring (Amherst, '21E), <i>On "Strange" Identities and Quantum Modular Forms: q-hypergeometric Identities and Modular Properties of a Peculiar Function due to Kontsevich</i>. • William (Jack) Wesley (Amherst, '18), <i>Combinatorial Proofs of Ramanujan's Congruences</i>. Co-recipient, Breusch Prize in Mathematics. • Yen Nhi Truong Vu (Amherst, '17), <i>On the Modular Transformations and Asymptotic Behaviors of Mock Modular Forms</i>. Recipient, Breusch Prize in Mathematics. • Edward Kim (Amherst, '15), <i>An Application of the Circle Method in Analytic Number Theory to the Partition Function</i>. Co-recipient, Breusch Prize in Mathematics.

*Event or travel canceled or postponed due to Covid-19.

UNDERGRAD.
RESEARCH
ADVISED

- Summer 2023 (Amherst): David Metacarpa '24, Wenche Tseng '24, *Quantum q -series and mock theta functions*, submitted (2023). 21 pp.
- Summer 2021 (Amherst): A. Dietrich '22, K. Ng '23, C. Stewart '22, S. Xu '23, *Overpartition ranks and quantum modular forms*, Research in Number Theory 8:45 (2022). 16pp.
- Summer 2020 (Amherst): E. Pratt '22, N. Solomon '22, A. Tawfeek '21E, *Quantum Jacobi forms and sums of tails identities*, Research in Number Theory 8:8 (2022). 24pp.
- Summer 2018 (Amherst): G. Carroll '20, J. Corbett '19, A. Folsom, and E. Thieu '19, *Universal mock theta functions as quantum Jacobi forms*, Research in the Mathematical Sciences, 6:6 (2019). 15pp.
- 2017–18 (Amherst): M. Barnett '18, A. Folsom, and W. Wesley '18, *Rank generating functions for odd-balanced unimodal sequences, quantum Jacobi forms and mock Jacobi forms*, Journal of the Australian Math. Society 109 (2020), 157-175.
- Summer 2017 (Amherst): M. Barnett '18, A. Folsom, O. Ukogu '18, W. Wesley '18, and H. Xu '18, *Quantum Jacobi forms and balanced unimodal sequences*, 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, *Strange combinatorial quantum modular forms*, 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, *On a general class of non-squashing partitions*, 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 total student papers submitted in the program.

OTHER
ADVISING

- Women in Numbers 5, Research Project Advisor, BIRS Banff 2020 – 2022
- Women in Numbers 4, Research Project Advisor, BIRS Banff 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

- AMS-MAA Joint Meetings, AMS special session, San Francisco Jan. 2024
- QTMC, Programming Committee, Queen Mary U. London June 2023
- 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

Amherst College (2014–present)

- Math 111: Introduction to the Calculus F14, S15, S17, F17, S18, S20
- Math 225: Fractal Geometry F14, F16, F19, S22, S23, S24
- Math 281: Combinatorics** F17, F21
- Math 260: Differential Equations S22, S23
- Math 310: Introduction to the Theory of Partitions** F16, S21
- Math 345: Functions of a Complex Variable F21
- Math 350: Groups, Rings and Fields (Abstract Algebra) S15
- Math 390: Topics in Analytic Number Theory** S22
- Math 460: Analytic Number Theory** S18, F20, F23
- Math 498: Senior Honors Thesis F14, F16, F17, F19, F23
- Math 499 Senior Honors Thesis S15, S17, S18, F20 (as 498 II), S23, S24

Yale University (2010–2014)

- 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

University of Wisconsin, Madison (2008–2010)

- 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

College service

- Department Chair, Mathematics & Statistics 2019–2021 and S2024
- Department Associate Chair, Mathematics F2023
- Faculty Committee on Adjudication 2021–2022
- 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

Department service (Mathematics & Statistics)

- Department Chair, Mathematics & Statistics 2019–2021 and S2024
- Department Associate Chair, Mathematics F2023
- Faculty Search Committees/Chair (Tenure-Track, Visitors, and Lecturers) annually, 2015–present
- Department Budget Subcommittee 2019–present
- Mathematics Colloquium Chair 2022–2023
- Mathematics Petitions Chair 2023–2024
- Math/Stat Table for Faculty-Students-Staff, Organizer 2021–22
- Math Major Info. Sessions Organizer 2021–22 and 2023–24
- Student Summer Research Showcase Organizer 2021–22 and 2023–24
- Mathematics Comprehensive Exam Co-Organizer/Advisor 2016–18
- Writer/Grader, Mathematics Comprehensive Exam 2014–present
- Honors Thesis Advisor (6 students) 2014–present
- Mathematics Major Advisor (~25 students/semester) 2014–present
- Chair, CT Valley Mathematics Colloquium Fall 2016
- Secretary, typing of weekly department meeting minutes Spring 2015
- Other misc. dept. service, e.g. formal mentoring of junior faculty, organizing thesis talks/committees, meeting prospective majors, etc. 2015–present

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 (<i>while a graduate student</i>)	
• 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*

**dates/details redacted for confidentiality; please ask for further info. if needed.*

PUBLIC OR STUDENT EVENTS AND PANELS

• JMM-AMS Editorial Board Panel panelist	Jan. 2023
• JMM-Spectra LGBTQ Math Workshop, Seattle , panelist	Apr. 2022
• Queer Resource Ctr. , Amherst Coll., faculty-staff panelist	Apr. 2022
• Lunch in the Time of Covid , panelist	Apr. 2021
• AMS Book Authors Panel , panelist, JMM 2021	Jan. 2021
• Dartmouth College Math Camp , guest mathematician,	July 2020
• WIN4 and WIN5 Grants and Funding Panel , panelist,	2017 & 2020
• Western New England U. , PME undergrad induction speaker,	April 2020*
• AWM/Spectra, JMM Denver , queer families in academia panelist	Jan. 2020
• College of the Holy Cross , PME undergrad. induction speaker	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

**Event or travel canceled or postponed due to Covid-19.*

PUBLIC SCHOOL OUTREACH	<p>EYE on Mathematics: Edgewood-Yale Educational Outreach 2012–15</p> <p>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.</p> <p>Yale National Initiative (YNI) Summer 2011</p> <p>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.</p> <p>Mathcounts Outreach 2012–14</p> <p>Faculty advisor to the Yale-New Haven chapter of the national Mathcounts program, which functions to enhance achievement in middle school mathematics.</p>
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— last updated December 4, 2023 —