

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 of Mathematics 2022 – present Full Professor of Mathematics 2019 – present Department Chair or Associate Chair 2023 – present & 2019 – 2021 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 Institute of Mathematics**
 - AIM Scientific Research Board Member 2024 – present
- **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 (Chair, 2024 – present) 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

70+ total publications. Publications 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. W. Bridges, W. Craig, A. Folsom, and L. Rolén, *Zero attractors of hook polynomials and related questions*, submitted 2024. 16 pp.
3. A. Folsom and D. Metacarpa, *Quantum q -series and mock theta functions*, **Research in the Mathematical Sciences** 11 no. 41 (2024), 21pp.
4. A. Folsom, J. Males, L. Rolén, and M. Storzer, *Oscillating asymptotics and conjectures of Andrews*, submitted 2024. 31 pp.
5. C. Ballantine, H. Burson, W. Craig, A. Folsom, and B. Wen, *Hook length biases and general linear partition inequalities*, **Research in the Mathematical Sciences** 10 no. 41 (2023). 36 pp.
6. A. Folsom, *Periodic partial theta functions and q -hypergeometric knot multi sums as quantum Jacobi forms*, **Journal of Mathematical Analysis and Applications** 530 iss. 2 (2024). 26pp.

7. A. Folsom, J. Males, and L. Rolin, *Equidistribution and partition polynomials*, **Ramanujan Journal**, accepted for publication 2023. 15pp.
8. 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** 89B (2023). 12pp.
9. 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.
10. 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.
11. 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.
12. 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.
13. 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.
14. 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.
15. A. Folsom, *Twisted Eisenstein series, cotangent-zeta sums, and quantum modular forms*, **Transactions of the London Mathematical Society**, 7(1) (2020), pp. 33–48.
16. 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.
17. 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.
18. A. Folsom, *Quantum Jacobi forms in number theory, topology, and mathematical physics*, **Research in the Mathematical Sciences**, 6:25 (2019). 34pp.
19. 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.
20. 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.
21. 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.
22. 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.
23. 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.

24. K. Bringmann and A. Folsom, *Quantum Jacobi forms and finite evaluations of unimodal rank generating functions*, **Archiv der Mathematik** 107 (2016), pp. 367–378.
25. 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.
26. A. Folsom, *Mock and mixed mock modular forms in the lower half-plane*, **Archiv der Mathematik** 107 (2016), pp. 487–498.
27. A. Folsom and P. Jenkins, *Zeros of modular forms of half integral weight*, **Research in Number Theory** 2:23 (2016), 25pp.
28. 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.
29. K. Bringmann, A. Folsom, and K. Mahlburg, *Quasimodular forms and $sl(m|m)^\wedge$ characters*, **Ramanujan Journal** 36 (2015), pp. 103–116.
30. 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.
31. 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.
32. 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.
33. 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.
34. A. Folsom, *Mock modular forms and d -distinct partitions*, **Advances in Mathematics** 254 (2014), pp. 682–705.
35. 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).
36. K. Bringmann and A. Folsom, *On a conjecture of B. Berndt and B. Kim*, **Ramanujan Journal** 32 (2013), pp. 1–4.
37. 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.
38. A. Folsom and S. Kimport, *Mock modular forms and singular combinatorial series*, **Acta Arithmetica** 159.3 (2013), pp. 257–297.
39. A. Folsom, K. Ono, and R.C. Rhoades, *Mock theta functions and quantum modular forms*, **Forum of Mathematics Pi** 1 (2013), pp. 1–27.
40. 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.
41. 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.
42. A. Folsom, Z. Kent, and K. Ono, *ℓ -adic properties of the partition function*, **Advances in Mathematics** 229 (2012), pp. 1586–1609.
43. A. Folsom, *Kac-Wakimoto characters and universal mock theta functions*, **Transactions of the American Mathematical Society** 363 no. 1 (2011), pp. 439–455.

44. A. Folsom and R. Masri, *The asymptotic distribution of traces of Maass-Poincaré series*, **Advances in Mathematics** 226 (2011), pp. 3724–3759.
45. A. Folsom, *Modular units and the q -difference equations of Selberg*, **Mathematical Research Letters** (17) no. 2 (2010), pp. 283–299.
46. A. Folsom, *Modularity and the distinct rank function*, **Ramanujan Journal** 23 (2010), pp. 183–193.
47. A. Folsom and R. Masri, *Equidistribution of Heegner points and the partition function*, **Mathematische Annalen** 348 no. 2 (2010), pp. 289–317.
48. K. Bringmann, A. Folsom, and K. Ono, *q -series and weight $3/2$ Maass forms*, **Compositio Mathematica** 145 (2009), pp. 541–552.
49. A. Folsom, *A characterization of the modular units*, **International Journal of Number Theory** (5) no. 2 (2009), pp. 303–310.
50. A. Folsom, *A short proof of the mock theta conjectures using Maass forms*, **Proceedings of the American Mathematical Society** 136 (2008), pp. 4143–4149.
51. 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.
52. 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.
53. 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.
54. A. Folsom, *Modular forms and Eisenstein’s continued fractions*, **Journal of Number Theory** 117 (2006), pp. 279–291.
55. 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

56. A. Folsom, *Mock Theta Functions*, and *Harmonic Maass forms and Mock Modular Forms*, Lecture notes (with exercises), unpublished. Building Bridges: 6th EU/US Summer School & Workshop on Automorphic Forms and Related Topics (BB6), CIRM Marseille, September 2-13, 2024.
57. 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.
58. A. Folsom and A. Kontorovich, *Advice for the campus interview*, **Notices of the American Mathematical Society**, vol. 66, no. 10, November 2019, 1651-1655.
59. 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.*
60. A. Folsom and S. Payne, *Research with undergraduates*, **Notices of the American Mathematical Society**, vol. 66 no. 2, February 2019, 199-200.
61. A. Folsom, *Symmetry, almost*, **Notices of the American Mathematical Society**, vol. 66 no. 1, January 2019, 87-88.
62. A. Folsom, *Harmonic Maass forms and mock modular forms*, submitted. 8 pp.
63. A. Folsom, *False theta functions and modular forms*, submitted. 7 pp.
64. A. Folsom, *Quantum modular forms*, submitted. 5 pp.

65. A. Folsom, *A Century of Answering the Question: What Is a Mock Theta Function*, submitted. 1 pp.
66. H-C Chan and A. Folsom, *Evaluations of the Rogers-Ramanujan Continued Fraction*, submitted. 7 pp.
67. A. Folsom, *Book Review: "My Search For Ramanujan" by K. Ono and A. Aczel*, **Bhavana** vol. 1 iss. 2., April 2017. 5 pp.
68. A. Folsom, *Perspectives on mock modular forms*, **Journal of Number Theory** 176 (2017), pp. 500-540.
69. 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.
70. A. Folsom, *WHAT IS... a mock modular form?*, **Notices of the American Mathematical Society** 57 iss. 11 (2010), pp. 1441–1443.
71. 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

72. *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. EU-US Automorphic Forms (BB6), CIRM Marseille | Sept. 2024 |
| Summer School Lecture Series, Harmonic Maass Forms | |
| 2. The Legacy of Ramanujan, Penn State , Plenary Speaker | June 2024 |
| 3. Dresden Lectures, Swarthmore College , Invited Lectures | Oct. 2022 |
| 4. Oliver Lecturer & Class of 1960 Speaker, Williams College | Sept. 2022 |
| 5. MAA Invited Address , Joint National Meetings, Baltimore | Jan. 2019 |
| 6. The Royal Society, London , Ramanujan Centenary Meeting | Oct. 2018 |
| 7. The Legacy of Ramanujan, U. Illinois , Plenary Speaker | June 2019 |
| 8. TORAS University of Oklahoma , Keynote Speaker | Mar. 2015 |
| 9. Yale Science and Engineering Forum , Plenary Speaker | Apr. 2012 |
| 10. PANTS VIII, U. South Carolina , Plenary Speaker | Dec. 2008 |

ADDITIONAL INVITED RESEARCH TALKS

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| 11. Vassar College , Colloquium | TBD 2024 |
| 12. Oregon State University , Seminar | Nov. 2024 |
| 13. Wesleyan University , Colloquium | March 2024 |
| 14. Northeastern University , Graduate Student Seminar | Oct. 2022 |
| 15. University of Virginia , REU Colloquium | July 2022 |
| 16. TU-Darmstadt, Germany , Seminar (Zoom) | Apr. 2021 |
| 17. City College of New York , Colloquium (Zoom) | Apr. 2021 |
| 18. Vanderbilt University , Seminar (Zoom) | Dec. 2020 |
| 19. UCLA , Seminar (Zoom) | Dec. 2020 |
| 20. University of Bristol, UK , Seminar (Zoom) | Dec. 2020 |
| 21. St. Petersburg State University, Russia , Seminar (Zoom) | Dec. 2020 |
| 22. Fairfield University , Colloquium | Nov. 2019 |
| 23. McGill University , Colloquium | May 2019 |
| 24. University of Pennsylvania , Seminar | April 2019 |
| 25. Bryn Mawr and Haverford Colleges , Colloquium | Feb. 2019 |
| 26. Institute for Advanced Study, Princeton , Member Seminar | Feb. 2019 |
| 27. Rice University , Colloquium | Nov. 2018 |
| 28. Boston University , Seminar | May 2017 |
| 29. Brown University , Seminar | Feb. 2017 |
| 30. Bucknell University , Distinguished Visitor, Colloquium | Apr. 2016 |
| 31. Penn. State University , Seminar | Apr. 2016 |

32. Institute for Advanced Study, Princeton , Member Seminar	Feb. 2016
33. Heidelberg University, Germany , Colloquium	Dec. 2015
34. Max-Planck-Institut, Bonn, Germany , Seminar	Dec. 2015
35. TU Darmstadt, Germany , Seminar	Dec. 2015
36. University College, Dublin , Seminar	Nov. 2015
37. SUNY Albany , Colloquium	Sept. 2015
38. University of Cologne, Germany , Seminar	Jun. 2015
39. Temple University , Colloquium	Apr. 2015
40. University of Massachusetts, Amherst , Geometry Seminar	Mar. 2015
41. Tulane University , Colloquium	Jan. 2015
42. Brandeis-Harvard-MIT-Northeastern , Joint Colloquium	Nov. 2014
43. Amherst College , Five College Number Theory Seminar	Sept. 2014
44. Wesleyan University , Colloquium	May 2014
45. Texas A&M University , Seminar	Apr. 2014
46. Yale University , Junior Colloquium	Apr. 2014
47. Johns Hopkins University , Colloquium	Oct./Nov. 2013
48. Heidelberg University, Germany , Seminar	May 2013
49. Max-Planck-Institut, Bonn, Germany , Oberseminar	Apr. 2013
50. Université de Nice, France , Seminar	Apr. 2013
51. University College Dublin, Ireland , Seminar	Apr. 2013
52. University of Cologne, Germany , Seminar	Apr. 2013
53. Brigham Young University , Colloquium	Jan. 2013
54. University of Wisconsin-Madison , Colloquium	Dec. 2012
55. University of Illinois, Urbana-Champaign , Seminar	Oct. 2012
56. Emory University , Seminar	Sept. 2012
57. Northeastern University , Seminar	Apr. 2012
58. University of Connecticut, Storrs , Seminar	Apr. 2012
59. Yale University , Seminar	Feb. 2012
60. Emory University , Seminar	Dec. 2011
61. University of Massachusetts, Amherst , Seminar	Nov. 2011
62. Northwestern University , Seminar	Apr. 2011
63. Boston College-MIT , Joint Seminar	Feb. 2011
64. CUNY Graduate Center , Seminar	Dec. 2010
65. SUNY Stony Brook , Seminar	Dec. 2010
66. University of Cologne, Germany , Seminar	Nov. 2010
67. MIT , ∞ -dim'l Lie Algebras Seminar	Oct. 2010
68. Wesleyan University , Colloquium	Oct. 2010
69. Yale University , Arithmetic Geometry Seminar	Sept. 2010
70. Yale University , Colloquium	Feb. 2010
71. University of Pittsburgh , Colloquium	Jan. 2010
72. University of Texas, Austin , Seminar	Jan. 2010
73. POSTECH, Pohang, Korea , Seminar	Dec. 2009
74. Rutgers University , Colloquium	Dec. 2009
75. Rice University , Colloquium	Nov. 2009
76. University of Wisconsin-Madison , Seminar	Sept. 2009
77. University of Wisconsin-Madison , Seminar	Nov. 2008
78. University College Dublin , Seminar	Feb. 2008
79. McMaster University, Canada , Arith. Geometry Seminar	Nov. 2007
80. Stanford University , Seminar	Nov. 2007
81. University of South Carolina , Seminar	Nov. 2007
82. University of Illinois, Urbana-Champaign , Seminar	Oct. 2007
83. University of Wisconsin-Madison , Seminar	Oct. 2007
84. Amherst College , Five College Number Theory Seminar	May 2007
85. University of Wisconsin-Madison , Seminar	May 2007
86. ETH Zurich, Switzerland , Seminar	Dec. 2006
87. Max-Planck-Institut, Bonn, Germany , Seminar	Sept. 2006
88. Princeton University , Seminar	May 2006
89. University of California, Los Angeles , Seminar	Feb. 2006

INVITED
CONFERENCE
AND WORKSHOP
TALKS

90. Boston University , Algebra Seminar	Nov. 2005
91. University of Wisconsin-Madison , Seminar	Feb. 2005
92. Harvard University , Graduate Student Seminar	Jul. 2004
93. AMS Eastern Sectional, Hartford , special session	Apr. 2025
94. Joint Math. Meetings, Seattle , special session	Jan. 2025
95. Int'l Conference on Modular Forms & q-series , U. Cologne	Mar. 2024
96. Clifford Lectures Symposium , Tulane U.	Feb. 2024
97. Assoc. for Women in Math. Research Symposium , Atlanta	Oct. 2023
98. New Conn. Between Physics & Number Thy. , Pollica, Italy	Jun. 2023
99. Joint Math. Meetings, Boston , special sessions (2 talks)	Jan. 2023
100. Spec($\bar{\mathbb{Q}}$) , Fields Institute, Toronto	July 2022
101. 100 years of mock theta functions , Vanderbilt,	May 2022
102. AMS Western Sectional, U. Denver , special session	May 2022
103. Joint Math. Meetings, Seattle , special sessions (2 talks)	April 2022
104. LGBTQ+ Math Day , Fields Institute, keynote speaker	Nov. 2021
105. Subbarao Centenary Symposium , IISER, India (virtual)	July 2021
106. New Conn. Num. Thy./Phys. , INI Cambridge, UK (Zoom)	May 2021
107. KITP Modularity in Quantum Systems , (Zoom)	Oct. 2020
108. Central U. of Himachal Pradesh, India , (Zoom)	Sept. 2020
109. 100 Years of Mock Theta Functions, Vanderbilt	May 2020*
110. AMS Graduate Conference (Brown) , keynote speaker	April 2020*
111. AMS-MAA Joint Meetings, Denver , special session	Jan. 2020
112. Arithmetic, geometry and modular forms , ETH Zurich	Jun. 2019
113. Hawaii Number Theory Conference (HINT)	Mar. 2019
114. AMS Western Sectional, U. Hawaii , special session	Mar. 2019
115. Modularity and 3-manifolds, ICERM (Brown)	Mar. 2019
116. Connecticut Summer School in Number Theory , UConn	May 2018
117. Modular Forms and Quantum Knots, BIRS, Banff	Mar. 2018
118. AMS-MAA Joint Meetings, San Diego special session	Jan. 2018
119. AMS Eastern Sectional, Hunter College , closing speaker	May 2017
120. Connecticut Summer School in Number Theory , UConn	Aug. 2016
121. Gainesville Number Theory Conference , UFlorida	Mar. 2016
122. Illinois Number Theory Conference , UIUC	Aug. 2015
123. Assoc. Women in Math. Research Symposium , UMaryland	Apr. 2015
124. AMS-MAA Joint Meetings, San Antonio , special session	Jan. 2015
125. Southern California Number Theory Day , UC-Irvine	Oct. 2014
126. AMS Eastern Sectional, Temple University , special session	Oct. 2013
127. Ramanujan 125 , University of Florida	Nov. 2012
128. University of Illinois Number Theory Conference	Oct. 2012
129. Building Bridges: EU-US Conf. , Aachen Uni., Germany	Aug. 2012
130. Krupp Symposium , University of Cologne, Germany	Feb. 2012
131. AMS-MAA Joint Meetings, Boston , special session	Jan. 2012
132. Quebec-Maine Number Theory Conference	Oct. 2011
133. CUNY Conference on Symmetric Groups	Sept. 2011
134. AMS Eastern Spring Sectional, Holy Cross , special session	Apr. 2011
135. ICTP Conference on Mock Modular Forms , Trieste, Italy	Mar. 2011
136. AMS-MAA Joint Meetings, New Orleans , special session	Jan. 2011
137. AMS-CMS Joint Meeting , Pucon, Chile	Dec. 2010
138. University of Hawaii Workshop on Automorphic Forms	Mar. 2010
139. KMS-AMS Winter Meeting , Seoul, Korea	Dec. 2009
140. Mock ϑ-functions and Applications , MPIM Bonn, Germany	May 2009
141. 1047th Meeting of the AMS , UIUC	Mar. 2009
142. University of Florida Conference on Quadratic Forms	Mar. 2009
143. University of Hawaii Workshop on Automorphic Forms	May 2008
144. University of Florida Number Theory Conference	Mar. 2008
145. AMS-MAA Joint Meetings, San Diego , special session	Jan. 2008
146. SASTRA-Ramanujan Conference , Kumbakonam, India	Dec. 2007

147. The Fields Institute Workshop	Nov. 2007
148. Heini Halberstam's 80th Birthday Conference , UIUC	May 2007
149. 21st Automorphic Forms Workshop , UC-Santa Barbara	Mar. 2007
150. Jahrestagung der DMV , Uni. Bonn, Germany	Sept. 2006
151. 20th Automorphic Forms Workshop , UC-Boulder	Mar. 2006
152. 19th Automorphic Forms Workshop , U. North Texas	Mar. 2005
153. 18th Automorphic Forms Workshop , UC-Santa Barbara	Mar. 2004
154. Summer School in Analytic Num. Theory , Catalina, CA	Aug. 2003
155. AMS-MAA Joint Meetings, New Orleans , undergrad. prize	Jan. 2001
156. 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
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

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

- 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 · Kathy Xing (Amherst, '24), *Traces of Singular Moduli as the Coefficients of a Meromorphic Modular Form*. Co-recipient, Breusch Prize in Mathematics.
- Thomas Meyer (Amherst, '23), *Resolution of the Alder-Andrews Conjecture*.
- Justin Warring (Amherst, '21E), *On “Strange” Identities and Quantum Modular Forms: q -hypergeometric Identities and Modular Properties of a Peculiar Function due to Kontsevich*.
- William (Jack) Wesley (Amherst, '18), *Combinatorial Proofs of Ramanujan’s Congruences*. Co-recipient, Breusch Prize in Mathematics.
- Yen Nhi Truong Vu (Amherst, '17), *On the Modular Transformations and Asymptotic Behaviors of Mock Modular Forms*. Recipient, Breusch Prize in Mathematics.
- Edward Kim (Amherst, '15), *An Application of the Circle Method in Analytic Number Theory to the Partition Function*. Co-recipient, Breusch Prize in Mathematics.
- UNDERGRAD. RESEARCH ADVISED · Summer 2024 (Amherst): J. Joire '25, T. Steciuk '25, A. van Lidth '25, *in-progress*.
- Summer 2023 (Amherst): D. Metacarpa '24, W. Tseng '24, *Quantum q -series and mock theta functions*, Research in the Mathematical Sciences 11 no. 41 (2024). 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 Maass 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

Other Teaching (2013–present)

• Lecturer/Instructor, Minicourse (for grad students & postdocs) EU-US Automorphic Forms (BB6), CIRM Marseille <i>Harmonic Maass Forms</i>	Sept. 2024
• Course and Research Assistant (for grad students & postdocs) Arizona Winter School, <i>Weak Maass Forms</i>	March 2013

**introduced to the College/University curriculum

DEPARTMENT
AND COLLEGE
SERVICE

Amherst College

College service

- Department Chair or Associate Chair 2023–present & 2019–21
- Faculty Lecture Committee 2024–present
- Amherst College Faculty Mentoring Program, Mentor 2023–present
- Faculty Committee on Adjudication 2021–2022
- New Faculty Orientation Panelist 2023–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

Department service (Mathematics & Statistics)

- Department Chair or Associate Chair 2023–present & 2019–21
- Faculty Search Committees/Chair (TT, VAP, LEC) annually, 2015–present
- Department Budget Committee (Chair) 2019–present
- Mathematics QFellow Hiring Committee (Co-chair) 2024–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 (*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 Panelist* multiple, 2010–present
- **National Security Agency**, Grant Panelist* multiple

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

DEPT. EXTERNAL
OR TENURE /
PROMOTION
REVIEWS

I have served* as a member of (non-Amherst College) Mathematics, and Mathematics & Statistics, departmental external review committees. I have also served as an external reviewer in the reappointment, tenure and promotion cases of multiple (non-Amherst College) mathematicians.

**dates/details redacted for confidentiality.*

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

- 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.
- 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 September 23, 2024 —