KEN ONO

Selected Leadership:

- Axiom Math, Founding Mathematician (12/25-present).
  Leads mathematics ensuring rigor and guiding long-term direction.
- U. Virginia, STEM Advisor to the Provost (10/22-1/26).
  Lead (with the Provost) an ongoing process of systemic transformation of the educational, operational, financial, and community engagement of STEM fields.
- Mathematical Sciences Education Board of the US National Academies (3/25-present)
  Provide guidance at the national level in the mathematical sciences in research and education.
- Institute for Advanced Study, Board of Trustees of AMIAS, Vice President ('23-present).
  Lead (with the board president and IAS Director) initiatives that sustain the Institute's mission of supporting research of the highest caliber.
- National Security Agency Advisory Board ('22-'25).
  Advise the Director on computational and mathematical matters in support of the agency mission of analyzing, collecting and processing information to protect the United States.
- Amer. Assoc. for the Advancement of Science, Council ('23-'24) & Section A Chair ('20-'23).
  Led (with the president) the mission of advancing STEM fields in service to society.
- U. Virginia, Chair of Department of Mathematics (8/21-1/23).
  Provided leadership and vision for the department to enhance its quality and reputation.
- American Mathematical Society, Vice President ('18-'21).
  Led (with the president) efforts to support the mathematical sciences in service to society.
- U.S. National Committee for Mathematics (NAS), Member ('10-'22).
  Ten member committee promoting international cooperation in the math with the IMU.

Selected Public Engagement:

- Host of the podcast HOOS in STEM, '22-present.
  Showcasing the cornucopia of STEM innovations at UVA.
- Sports Science (advisor of multiple Olympic and world champion swimmers), '16-present.
  Selected media: ESPN, Nature, NBC Olympics, NPR, & NY Times.
- Spirit of Ramanujan Global STEM Talent Search, Organizer, 2016-present.
- Nat Geo TV Program *Star Talk* hosted by Neil deGrasse Tyson, 2017.
- *Eureka* TV Program (30 minute special), 2017.
- Interviews: The Takeaway ('16), Science Friday ('16), Inquiry ('16), Radio IQ ('22), With Good Reason('24), Freakonomics Radio Network ('24), All Things Considered ('25).
- NSF Matters (with Dir. F. Cordova) for Presidential Transition, White House, 2016.
- Assoc. Producer of *The Man Who Knew Infinity* starring J. Irons and D. Patel ('14).
- Cast, *The Genius of Srinivasa Ramanujan*, Docudrama by N. Kudhyadi Films, 2013.
- AMS "*Who wants to be a mathematician*", Program Advisor, '04-'20.
  Sponsor and consultant for a math game for high school students in North America.
- NSF 50 "*Where discoveries begin*", '00-'01.
  Keynote scientist on national tour promoting NSF's 50th birthday.

Selected Employment:

- Axiom Math, Founding Mathematician ('25-present).
- U. Virginia, Rosenblum Prof. of Math ('22-present), Thomas Jefferson Prof. of Math ('19-'22),
- Adjunct Staff Member, Institute for Defense Analyses ('25-present).
- Epoch AI, Freelance Mathematician ('24-'26).
- U. Virginia, (Secondary Roles): Prof of Data Science by Courtesy ('23-present), Prof Affiliate of Statistics ('23-present), Prof of Electrical and Comp. Engineering by Courtesy ('25-present).
- Emory University, Asa Griggs Candler Professor of Mathematics ('10-'20).
- UW Madison, Associate Professor ('99-'01), Professor ('01-'03), Solle & Margaret Manasse Professor of Science ('03-'11), Hilldale Professor of Mathematics ('08-'11).
- Penn State, Assistant Prof. ('97-'99), Martarano Prof. of Mathematics ('99-'00).
- Institute for Advanced Study, Member ('95-'97).

Education:

- Ph.D., Pure Mathematics, University of California at Los Angeles, March 1993
- M.A., Pure Mathematics, University of California at Los Angeles, March 1990
- B.A., Pure Mathematics, University of Chicago, June 1989

Selected Honors:

- Fellow of the Asia-Pacific Artificial Intelligence Association (AAIA), 2025.
- Honorary Member of Phi Beta Kappa at University of Virginia, 2025.
- Honorary Fellow of the Romanian Academy of Sciences, 2025.
- National Academy of Sciences Cozzarelli Prize (Runner Up), 2024.
- Honorary Member of Phi Beta Kappa at University of Chicago, 2024.
- Honorary Fellow of the Indian Academy of Sciences, 2024.
- Fellow of the Asian American Scholars Forum, 2023.
- Effie Silver Award (Miller 64 Super Bowl ad), 2023.
- University of Chicago Alumni Award for Professional Achievement, 2023.
- Phi Beta Kappa Distinguished Scholar, 2020-22.
- Rhodes Trust Inspirational Educator Award, 2019.
- Prose Award (Best Scholarly Mathematics Book), Assoc. of American Publishers 2018.
- Fellow of the American Mathematical Society, 2012.
- NSF Director's Distinguished Teaching Scholar Award, 2005.
- Guggenheim Fellowship, 2003.
- PECASE Award from President Clinton, 2000.
- David and Lucile Packard Fellowship, 1999.
- Alfred P. Sloan Foundation Research Fellowship, 1999.
- NSF CAREER Award, 1999.
- NSA Young Investigator, 1997.

Research Interests:

- Algebraic & Analytic Number Theory
- Cryptography
- Data Science
- Representation Theory

Publications:

1. *Shimura sums related to quadratic imaginary fields*
   Proceedings of the Japan Academy of Sciences, **70** (A), No. 5, 1994, pages 146-151.
2. *Congruences on the Fourier coefficeints of modular forms on* $\Gamma_0(N)$,
   Contemporary Mathematics **166**, 1994, pages 93-105., The Rademacher Legacy to Mathematics.
3. *On the positivity of the number of partitions that are t-cores,*
   Acta Arithmetica **66**, No. 3, 1994, pages 221-228.
4. *Superlacunary cusp forms*, (Co-author: Sinai Robins),
   Proceedings of the American Mathematical Society **123**, No. 4, 1995, pages 1021-1029.
5. *Parity of the partition function*,
   Electronic Research Annoucements of the American Mathematical Society, **1**, No. 1, 1995, pages 35-42
6. *On the representation of integers as sums of triangular numbers*
   Aequationes Mathematica (Co-authors: Sinai Robins and Patrick Wahl) **50**, 1995, pages 73-94.
7. *A note on the number of t-core partitions*
   The Rocky Mountain Journal of Mathematics **25**, 3, 1995, pages 1165-1169.
8. *A note on the Shimura correspondence and the Ramanujan* $\tau(n)$*-function*,
   Utilitas Mathematica **47,** 1995, pages 153-160.
9. *Congruences for Frobenius partitions.*
   Journal of Number Theory, **57,** 1, 1996 pages 170-180.
10. *Defect zero* $p-$*blocks for finite simple groups ,* (Co-author: Andrew Granville)
    Transactions of the American Mathematical Society, **348**, 1, 1996, pages 331-347.
11. *On the parity of the partition function in arithmetic progressions.*
    Journal fur die Reine und angewandte Mathematik, **472**, 1996, pages 1-15.
12. *Congruences for the Fourier coefficients of half-integral weight modular forms and special values of* $L-$*functions,* (Co-authors: Antal Balog and Henri Darmon).
    Proceedings for a Conference in Honor of Heini Halberstam, **1**, 1996, pages 105-128.
13. *Congruences for partition functions*, (Co-author: Dennis Eichhorn),
    Proceedings for a Conference in Honor of Heini Halberstam, **1**, 1996, pages 309-321.
14. *Rank zero quadratic twists of modular elliptic curves*,
    Compositio Mathematica,**104**, 1996, pages 293-304.
15. *Quadratic forms and elliptic curves, III*, (Co-author: Takashi Ono),
    Proceedings of the Japan Academy of Sciences, Ser. A, **72,** 1996, pages 204-205.
16. *Euler's concordant forms*
    Acta Arithmetica, **65**, 1996, pages 101-123.
17. *Some recurrences for arithmetical functions*, (Co-authors: Neville Robbins and Brad Wilson)

Journal of the Indian Mathematical Society, **62**, 1996, pages 29-50.

18. *Divisibility properties of certain partition functions by powers of primes*, (Co-author: Basil Gordon),
The Ramanujan Journal, **1,** 1997, pages 25-35.

19. *Parity of the Fourier coefficients of modular forms,* (Co-author: Brad Wilson).
Illinois Journal of Mathematics, **41,** 1997, pages 142-150.

20. *Odd values of the partition function.*
Discrete Mathematics, **169**, 1997, pages 263-268.

21. $4-$*core partitions and class numbers*, (Co-author: Lawrence Sze),
Acta Arithmetica, **65**, 1997, pages 249-272.

22. *Twists of elliptic curves,*
Compositio Mathematica, **106**, 1997, pages 349-360.

23. *Ramanujan, taxicabs, birthdates, zipcodes and twists.*
American Mathematical Monthly, **104,** No. 10, 1997, pages 912-917.

24. *Tate-Shafarevich groups of the congruent number elliptic curves,*
Acta Arithmetica, **81**, 1997, pages 247-252.

25. *Ramanujan's ternary quadratic form*, (Co-author: Soundararajan Kannan),
Inventiones Mathematicae, **130**, 3, 1997, pages 415-454.

26. *Eta-quotients and elliptic curves*, (Co-author: Yves Martin),
Proceedings of the American Mathematical Society, **125**, 1997, pages 3169-3176.

27. *Values of Gaussian hypergeometric series*
Transactions of the American Mathematical Society, **350**, 3, 1998, pages 1205-1223.

28. *A binomial coefficient identity related to a conjecture of F. Beukers*,
(Co-authors: Scott Ahlgren, Shalosh Ekhad, Doron Zeilberger),
Electronic Journal of Combinatorics, Volume 5 (1), 1998, R10.

29. *Fourier coefficients of half integral weight modular forms modulo* ℓ (Co-author: Chris Skinner),
Annals of Mathematics, **147**, No. 2, 1998, pages 453-470.

30. *Gordon's* ϵ*-conjecture on the lacunarity of modular forms*,
Comptes Rendues Math. Rep. of Acad. Sci. Canada, **20**, (4), 1998, pages 103-107.

31. *Partitions into distinct parts and elliptic curves*,
Journal of Combinatorial Theory, Series A, **82**, 1998, pages 193-201.

32. *A note on a question of J. Nekovàř and the Birch and Swinnerton-Dyer Conjecture*,
Proceedings of the American Mathematical Society, **126**, 1998, pages 2849-2853.

33. *The residue of* $p(n)$ *modulo small primes,*
The Ramanujan Journal, Erdös Memorial Issue, **2**, 1998, pages 47-54.

34. *The partition function in arithmetic progressions.*
Mathematische Annalen, **312**, 1998, pages 251-260.

35. *Rook theory and* $t-$*cores*, (Co-authors: Jim Haglund and Lawrence Sze).
Journal of Combinatorial Theory, Series A, **84**, 1998, pages 9-37.

36. *Corrigendum: Fourier coefficients of half-integral weight modular forms modulo ℓ,*
(Co-author: Christopher Skinner),
Annals of Mathematics, **148**, 1998, page 361,
A typesetting error is corrected in paper 29.

37. *Non-vanishing of quadratic twists of modular $L-$functions,* (Co-author: Chris Skinner),
Inventiones Mathematicae, **134**, 1998, pages 651-660.

38. *Integers represented by ternary quadratic forms,* (Co-author: Soundararajan Kannan),
Proceedings of the 5^{th} Meeting of the Canadian Number Theory Association, CRM Proceedings and Lecture Notes, **19**, 1998, pages 281-290.

39. *A Note on the Irreducibility of Hecke polynomials*, (Co-author: Kevin James).
Journal of Number Theory, **73**, 1998, pages 527-532.

40. *Non-vanishing of values of modular L-functions and some applications*,
(Co-authors: Jan Hendrik Bruinier, Kevin James, Winfried Kohnen, Vinayak Vatsal, Chris Skinner),
Proceedings of Topics in Number Theory, Kluwer Academic Publishers, 1999, pages 115-126.

41. *Theorems and conjectures involving rook polynomials with real roots,* (Co-authors: Jim Haglund and David Wagner),
Proceedings of Topics in Number Theory, Kluwer Academic Publishers, 1999, pages 207-222.

42. *Indivisibility of class numbers of imaginary quadratic fields and orders of Tate-Shafarevich groups of elliptic curves with complex multiplication,*
(Co-author: Winfried Kohnen).
Inventiones Mathematicae, **135**, 1999, pages 387-398.

43. *Selmer groups of quadratic twists of modular elliptic curves,*
(Co-author: Kevin James),
Mathematische Annalen, **314**, 1999, pages 1-17.

44. *Ramanujan's unpublished manuscript on the partition and tau functions with commentary,*
(Co-author: Bruce Berndt), The Andrews Festchrift, Eds. D. Foata and G.-N. Han, Springer Verlag, 2001, pages 39-110.

45. *On the circular summation of the eleventh powers of Ramanujan's theta function,*
Journal of Number Theory, **76**, 1999, pages 62-65.

46. *Indivisbility of class numbers of real quadratic fields.*
Compositio Mathematica, **119**, 1999, pages 1-11.

47. *The partition function and the arithmetic of certain modular L-functions,*
(Co-author: Li Guo),
International Mathematical Research Notices, 1999, No. 21, pages 1179-1197.

48. *Distribution of the partition function modulo m*,
Annals of Mathematics, **151**, 2000, pages 293-307.

49. *A Gaussian hypergeometric series evaluation and Apèry number congruences,*
(Co-author: Scott Ahlgren),
Journal fur die reine und angewandte Mathematik, **518**, 2000, pages 187-212.

50. *Modularity of a certain Calabi-Yau threefold,*
(Co-author: Scott Ahlgren),
Monatshefte für Mathematik, **129**, 2000, 177-190.

51. *On "good" half-integral weight modular forms*,

(Co-author: Jorge Jimenez Urroz).
Mathematics Research Letters, **7**, No. 2, 2000, 205-212.

52. *The 2-adic behavior of the number of partitions into distinct parts,*
(Co-author: David Penniston),
Journal of Combinatorial Theory, Series A, **92**, 2000, 138-157.

53. *Nonvanishing of quadratic twists of modular L-functions with applications for elliptic curves,*
Journal fur die reine und angewandte Mathematik, **533**, 2001, 81-97.

54. *Differential endomorphisms for modular forms on* $\Gamma_0(4)$,
Symbolic Computation, Number Theory, Special Functions, Physics and Combinatorics (Proceedings, Gainesville, 1999), Kluwer Acad. Publ. (Ed. F. Garvan and M. Ismail), 223-230.

55. *q-series identities and values of certain L-functions,*
(Co-author: George Andrews and Jorge Jimenez-Urroz),
Duke Mathematical Journal, **108**, 2001, pages 395-419.

56. *Corrigendum: The 2-adic behavior of the number of partitions into distinct parts,*
(Co-author: David Penniston),
Journal of Combinatorial Theory, Series A, **95**, 2001, page 196,
Theorem 11 of #52 was stated incorrectly. It is corrected here.

57. *Parity of the partition function in arithmetic progressions II,*
(Co-author: Matthew Boylan),
Bulletin of the London Mathematical Society, **33**, No. 5, 2001, pages 558-564.

58. *Addition and counting: The arithmetic of partitions,*
(Co-author: Scott Ahlgren),
Notices of the American Mathematical Society, **48**, October 2001, pages 978-984.

59. *Arithmetic of the partition function*,
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Kluwer Acad. Publ., pages 243-253.

60. *Prime power degree representations of the symmetric and alternating groups,*
(Co-authors: Antal Balog, Christine Bessenrodt and Jorn Olsson),
Journal of the London Mathematical Society, **64**, 2001, 344-356.

61. *Congruence properties for the partition function,*
(Co-author: Scott Ahlgren),
Proceedings of the National Academy of Sciences, USA, **98**, Issue 23, 2001, 12882-12884.

62. *The Chebotarev Density Theory in short intervals and some questions of Serre,*
(Co-author: Antal Balog),
Journal of Number Theory, **91**, 2001, pages 356-371.

63. *Congruences and conjectures for the partition function,*
(Co-author: Scott Ahlgren),
Proceedings of the Conference on q-series with applications to combinatorics, number theory and physics, AMS Contemporary Mathematics, **291**, [Ed. B. C. Berndt and K. Ono], 2001, pages 1-10.

64. *Extension of Ramanujan's congruences for the partition function modulo powers of 5,*
(Co-author: Jeremy Lovejoy),
Journal fur die reine angewandte Mathematik, **542**, 2002, pages 123-132.

65. *Zeta functions of an infinite family of $K3$ surfaces,*
(Co-authors: Scott Ahlgren and David Penniston),
American Journal of Mathematics, **124**, 2002, pages 353-368.

66. *Representations of integers as sums of squares,*
Journal of Number Theory, **95**, 2002, pages 253-258.

67. *A q-series identity and the arithmetic of Hurwitz zeta-functions*,
(Co-author: Gwynneth Coogan),
Proceedings of the American Mathematical Society, **131**, 2003, pages 719-724.

68. *Quadratic twists of modular forms and elliptic curves.*
(Co-author: Matthew A. Papanikolas),
Proceedings of the Millenial Number Theory Conference, Urbana, Illinois (Ed. M. A. Bennett etc. al.), Vol. III, A. K. Peters, 2002, pages 73-86.

69. *Congruences for ${}_3F_2$ hypergeometric functions over finite fields,*
(Co-author: David Penniston),
Illinois Journal of Mathematics, **46**, (2002), 679-684.

70. *Weierstrass points on $X_0(p)$ and supersingular j-invariants*,
(Co-author: Scott Ahlgren).
Mathematiche Annalen, **325**, 2003, 355-368.

71. *Coefficients of half-integral weight modular forms,*
(Co-author: Jan H. Bruinier),
Journal of Number Theory, **99** (2003), pages 164-179.

72. *Modular form congruences and Selmer groups,*
(Co-author: William J. McGraw),
Journal of the London Mathematical Society, **67**, (2003), pages 302-318.

73. *Arithmetic of the coefficients of Cohen's Eisenstein series*,
(Co-authors: Antal Balog and William McGraw),
Acta Arithmetica, **107**, (2003), pages 337-344.

74. *Hypergeometric generating functions for the values of Dirichlet and other L-functions,*
(Co-author: Jeremy Lovejoy),
Proceedings of the National Academy of Sciences, USA, **100**, No. 12, (2003), pages 6904-6909.

75. *Baxter algebras and Hopf algebras*,
(Co-authors: George Andrews, Li Guo, and William Keigher),
Transactions of the American Mathematical Society, **355**, (2003), pages 4639-4656.

76. *The life and work of R. A. Rankin*,
(Co-authors: Bruce C. Berndt and Winfried Kohnen),
The Ramanujan Journal, **7**, (2003), pages 11-40.

77. *Elements of class groups and Shafarevich-Tate groups of elliptic curves,*
(Co-author: Antal Balog),
Duke Mathematical Journal, **120**, (2003), pages 35-63.

78. *Arithmetic of Borcherds' exponents*,
(Co-author: Jan Bruinier),
Mathematische Annalen, **327**, (2003), pages 293-303.

79. *p-adic properties of the values of the j-function*,
(Co-author: Matt Papanikolas),
Galois Theory and Modular Forms, Kluwer Acad. Publ., Editors: K. Hashimoto, K. Miyake and H. Nakamura, 2003, pages 357-366.

80. *The arithmetic of the values of modular functions and the divisors of modular forms,*
(Co-authors: Jan H. Bruinier and Winfried Kohnen),
Compositio Mathematica, **140** (2004), pages 552-566.

81. *Arithmetic of certain hypergeometric modular forms*,
(Co-author: Karl Mahlburg),
Acta Arithmetica, **113**, (2004), pages 39-55.

82. *Hecke operators and the q-expansion of modular forms*,
Proceedings of the 7th Meeting of the Canadian Number Theory Association, Montreal 2002, CRM Proceedings and Lecture Notes **36**, American Mathematical Society, (2004), pages 229-235.

83. *Arithmetic of singular moduli and class polynomials*,
(Co-author: Scott Ahlgren),
Compositio Mathematica, **141**, (2005), pages 293-312.

84. *Gaussian hypergeometric functions and Hecke operators*,
(Co-authors: Sharon Frechette and Matt Papanikolas),
International Mathematical Research Notices, **60**, (2004), pages 3233-3262.

85. *Corrigendum: Coefficients of half-integral weight modular forms,*
(Co-author: Jan H. Bruinier),
Journal of Number Theory, **104**, (2004), pages 378-379.
The hypothesis that M is prime is needed for Theorems 1 and 2.3 of #71.

86. *2-adic properties of certain modular forms and their applications to arithmetic functions*,
(Co-author: Yuichiro Taguchi),
International Journal of Number Theory, **1**, No. 1, (2005), pages 75-101.

87. *Partitions and McKay numbers for S_n*,
Journal of Combinatorial Theory, Series A, **108**, (2004), pages 185-197.

88. *The combinatorics of traces of Hecke operators*,
(Co-authors: Sharon Frechette and Matt Papanikolas),
Proceedings of the National Academy of Sciences, USA, **101**, No. 49, (2004), pages 17016-17020.

89. *Linear relations between modular form coefficients and non-ordinary primes* (Co-authors: YoungJu Choie and Winfried Kohnen),
Bulletin of the London Mathematical Society, **37**, Part 3, (2005), pages 335-341.

90. *Hilbert class polynomials and traces of singular moduli,*
(Co-authors: Jan Hendrik Bruinier and Paul Jenkins),
Mathematische Annalen, **334**, no 2, (2006), page 373-393.

91. *On the work of Basil Gordon,*
(Co-authors: George E. Andrews, Krishnaswami Alladi, and Richard McIntosh),
Journal of Combinatorial Theory, Series A, **113**, (2006), pages 21-38.

92. *Reduction of CM elliptic curves and modular function congruences,*
(Co-authors: Noam D. Elkies and Tonghai Yang),
International Mathematical Research Notices, **44** (2005), pages 2695-2707.

93. *Identities for traces of singular moduli,*
(Co-author: Kathrin Bringmann),
Acta Arithmetica, **119** (2005), pages 317-327.

94. *Number theoretic properties of Wronskians in Andrews-Gordon q-series*,
(Co-authors: Antun Milas and Eric Mortenson),
International Journal of Number Theory, **4**, (2008), pages 323-337.

95. *Traces of singular moduli on Hilbert modular surfaces*,
(Co-authors: Kathrin Bringmann and Jeremy Rouse),
International Mathematical Research Notices, **47** (2005), pages 2891-2912.

96. *Arithmetic properties of coefficients of half-integral weight Maass-Poincarè series*,
(Co-author: Kathrin Bringmann),
Mathematische Annalen, **337** (2007), pages 591-612.

97. *An arithmetic formula for the partition function*,
(Co-author: Kathrin Bringmann),
Proceedings of the American Mathematical Society, **135** (2007), pages 3507-3514.

98. *The $f(q)$ mock theta function conjecture and partition ranks*,
(Co-author: Kathrin Bringmann),
Inventiones Mathematicae, **165** (2006), pages 243-266.

99. *Singular moduli generating functions for modular curves and surfaces*,
Proceedings of the Gauss-Dirichlet Conference, Clay Math. Institute Proceedings, Clay Math. Proc., **7**, Amer. Math. Soc., 2007, pages 185-206.

100. *Dyson's ranks and Maass forms*,
(Co-author: Kathrin Bringmann),
Annals of Mathematics, **171** (2010), pages 419-449.

101. *Ramanujan's congruences and Dyson's crank*,
(Co-author: George Andrews), Proceedings of the National Academy of Sciences, USA, **102**, No. 43 (2005), page 15277.

102. *Mock theta functions, ranks, and Maass forms*, Surveys in Number Theory, Developments in Mathematics **17**, Springer-Verlag, 2008, pages 119-142.

103. *Honoring a gift from Kumbakonam*,
Notices of the American Mathematical Society, **53**, Number 6 (2006), pages 640-651.

104. *Divisibility criteria for class numbers of imaginary quadratic fields*,
(Co-author: Paul Jenkins),
Acta Arithmetica, **125** (2006), pages 285-289.

105. *q-series and weight 3/2 Maass forms*,
(Co-authors: Kathrin Bringmann and Amanda Folsom),
Compositio Mathematica, **145** (2009), pages 541-552.

106. *Lifting elliptic cusp forms to Maass forms with an application to partitions*,

(Co-author: Kathrin Bringmann),
Proceedings of the National Academy of Sciences, USA, **104**, No. 10, (2007), pages 3725-3731.

107. *Duality involving the mock theta function $f(q)$,*
(Co-author: Amanda Folsom),
Journal of the London Mathematical Society, **77** (2008), pages 320-334.

108. *Eulerian series as modular forms*,
(Co-authors: Kathrin Bringmann and Robert Rhoades),
Journal of the American Mathematical Society, **21** (2008), pages 1085-1104.

109. *Heegner divisors, L-functions, and Maass forms*,
(Co-author: Jan H. Bruinier),
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110. *Algebraicity of harmonic Maass forms*, SASTRA Prize volume,
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111. *The spt-function of Andrews*,
(Co-author: Amanda Folsom),
Proceedings of the National Academy of Sciences, USA, **105** no. 51 (2008), pages 20152-20156.

112. *A mock theta function for the Delta-function*,
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113. *Differential operators for harmonic weak Maass forms and the vanishing of Hecke eigenvalues*,
(Co-authors: Jan H. Bruinier and Robert Rhoades),
Mathematische Annalen **342** (2008), pages 673-693.

114. *Unearthing the visions of a master: Harmonic Maass forms and number theory*,
Proceedings of the 2008 Harvard-MIT Current Developments in Mathematics Conference, Int. Press, Somerville, MA, 2009, pages 347-454.

115. *Coefficients of harmonic weak Maass forms*,
(Co-author: Kathrin Bringmann),
Proceedings of the 2008 University of Florida Conference on Partitions, q-series and modular forms, Developments in Mathematics **23**, Springer-Verlag, New York, (2012), pages 23-38.

116. *Modular forms arising from $Q(n)$ and Dyson's rank*, Dennis Stanton special issue of Advances in Applied Mathematics,
(Co-author: Maria Monks),
Advances in Applied Mathematics **46** (2011), pages 457-466.

117. *Hook lengths and 3-cores*,
(Co-author: Guo-Niu Han),
Annals of Combinatorics **15** (2011), pages 305-312.

118. *$S0(3)$-Donaldson invariants of $\mathbb{C}P^2$ and mock theta functions*,
(Co-author: Andreas Malmendier),
Geometry and Topology **16** (2012), pages 1767-1833.

119. *Corrigendum to "Duality involving the mock theta function $f(q)$"*,
(Co-author: Amanda Folsom)
Note: Some numbers in Table 1.3 of #107 are corrected.
Journal of the London Mathematical Society **79** (2009), page 544.

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Journal of the Indian Mathematical Society, (2008), Special Centenary Issue, pages 149-163.

121. *Probabilities as values of modular forms and continued fractions*,
(Co-author: Riad Masri),
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122. *Some characters of Kac and Wakimoto and nonholomorphic modular functions*,
(Co-author: Kathrin Bringmann),
Mathematische Annalen, **345** (2009), pages 547-558.

123. *Identities and congruences for the coefficients of Ramanujan's* $\omega(q)$,
(Co-author: Jan H. Bruinier),
The G. E. Andrews 70th Birthday issue of the Ramanujan Journal, **23** (2010), pages 151-157.

124. *Corrigendum to "Differential operators for harmonic weak Maass forms and the vanishing of Hecke eigenvalues"*,
(Co-authors: Jan H. Bruinier and Rob Rhoades)
Note: The statement of Theorem 1.4 is corrected.
Mathematische Annalen, **345** (2009), page 31.

125. *p-adic coupling of mock modular forms and shadows*,
(Co-authors: Pavel Guerzhoy and Zach Kent).
Proceedings of the National Academy of Sciences, USA, **107** no. 14, (2010), pages 6169-6174.

126. *The parity of the partition function*, Advances in Mathematics, **225** (2010), pages 349-366.

127. *The last words of a genius*,
Notices of the American Mathematical Society, **57**, (2010), pages 1410-1419.

128. *Gauss's* ${}_2F_1$ *hypergeometric function and the congruent number elliptic curve*,
(Co-author: Ahmad El-Guindy).
Acta Arithmetica, **144** (2010), no. 3, pages 231-239.

129. *Hasse invariants for the Clausen elliptic curves*,
(Co-author: Ahmad El-Guindy).
Ramanujan Journal, (Special Issue for Dennis Stanton and Mourad Ismail), **31** (2013), pages 3-13.

130. *Eichler-Shimura theory for mock modular forms*,
(Co-authors: Kathrin Bringmann, Pavel Guerzhoy, and Zach Kent).
Mathematische Annalen, **355** (20103), pages 1085-1121.

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- July 1992 *Fourier coefficients and their congruences*,

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- September 1992 *Infinitely many exceptional primes and weight one forms in the Swinnerton-Dyer Theory of congruences*,
UNESCO-CIMPA Summer School on Automorphic Forms, Nice, France.
- December 1992 *Modular forms with complex multiplication and dihedral extensions of* $\mathbb{Q}$,
West Coast Number Theory Conference, Corvallis, Oregon.
- March 1993 *Representations of integers as sums of triangular numbers*,
Stanford Workshop on Automorphic Forms, Palo Alto, California.
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AMS Special Session on q-series, Minneapolis, Minnesota.
- November 1994 *The classification of defect zero* $p-$*blocks for finite simple groups*,
Midwest Number Theory Day, Chicago, Illinois.
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West Coast Number Theory Conference, San Diego, California.
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- May 1995 *Congruences for special values of* $L-$*functions*,
International Conference in Analytic Number Theory in Honor of Heini Halberstam, Allerton Park, Illinois.
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AMS Special Session on Number related to Stark's conjectures, Burlington, Vermont.
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- January 1996 *Rank zero quadratic twists of elliptic curves*,
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  Workshop on automorphic forms, Stanford University, California.
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  AMS Special Session in Analytic Number Theory, New York, New York.
- August 1996 *Ramanujan's ternary quadratic form,* (40 minute speaker),
  The 5^{th} Canadian Number Theory Conference, Ottawa, Canada.
- October 1996 *$L-$functions mod p,*
  AMS Special Session on Automorphic forms, Lawrenceville, New Jersey.
- December 1996 *Some theorems about modular $L-$functions*,
  West Coast Number Theory Conference, Las Vegas, Nevada.
- March 1997 *Central critical values of modular $L-$functions*, (1 hour speaker),
  Japanese-American Mathematical Institute Conference on Elliptic curves and Applications, Baltimore, Maryland.
- April 1997 *Central critical values of modular $L-$functions*, (1 hour speaker),
  The Illinois Number Theory Conference, Urbana, Illinois.
- July 1997 *Critical values of modular L-functions*,
  Conference on number theory on the occasion of Andrzej Schinzel's 60th birthday, Warsaw, Poland.
- September 1997 *Indivisibility of class numbers and L-values*,
  AMS Special Session on Number Theory and arithmetic geometry, Montreal, Canada.
- April 1998 *p-divisibility of class numbers of imaginary and real quadratic fields, and orders of Tate-Shafarevich groups of rank zero elliptic curves*,
  AMS Special Session on Modular Identities and q-series, Philadelphia, Pennsylvania.
- June 1998 *Nonvanishing of q-series coefficients*, (1 hour speaker),
  10th Conference on Formal Power Series and Algebraic Combinatorics,
  Fields Institute, Toronto, Canada.
- June 1998 *Nonvanishing of q-series coefficients*, (1 hour speaker), AMS Joint Summer Research Conference, "$q-$series, Combinatorics, and Computer Algebra", South Hadley, Massachusetts.
- October 1998 *In the beginning...* (1 hour speaker),
  Celebration of G. Andrews' 60th Birthday, State College, Pa.
- June 1999, *New results on the partition function* (40 minute speaker),
  6^{th} Canadian Number Theory Conference, Winnipeg, Canada.
- June 1999, 1999 Park City - Institute for Advanced Study Institute on Arithmetic Algebraic Geometry, Park City, Utah.
- July 1999, *Ramanujan congruences and more....*,
  MASS REU MathFest (45 minute speaker), Penn State University
- November 1999, *Recent results for the partition function and some questions of Serre,* (50 minute speaker),
  Conference on symbolic computation, number theory, special functions, physics and combinatorics, Gainesville, Florida.
- December 1999, *Chebotarev in intervals and applications* (1 hour speaker),

Galois theory and modular forms, Saga, Japan.

- January 2000, *Modular forms and elliptic curves,* (50 minute speaker),
  Joint AMS-MAA Meetings, Washington D. C.
- April 2000, *Tate-Shafarevich groups and ranks of quadratic twists of elliptic curves* (1 hour speaker), 6th Midwest Algebraic Number Theory Day,
  Ohio State University, Columbus, Ohio.
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  The Millenial Conference on Number Theory, (1 hour speaker), Urbana, Illinois.
- May-June 2000, *History of the Partition Function,*
  Ramanujan's congruences and modern number theory, (2 hour speaker),
  NATO Advanced Study Institute, Special Functions 2000: Current Perspective and Future Directions. Tempe, Arizona.
- June 2000, *Recent work on the Partition function*
  Tenth SIAM Conference on Discrete Mathematics Minneapolis, Minnesota.
- August 2000, *q-series identities and L-functions* (50 minute speaker),
  Number Theory in Honor of the Lehmers, Berkeley, California.
- September 2000, *Topics in Number Theory,*
  12th Annual Packard Foundation Fellows Meeting, Monterey, California.
- September 2000, *Bizarre identities and L-functions,*
  AMS Special Session on Analytic Number Theory, Toronto, Canada.
- December 2000, *The arithmetic of Borcherds exponents*,
  CMS Winter Meeting, Special Session on Number Theory, Vancouver, Canada.
- January 2001, *Hypergeometric generating functions for zeta and L-values*,
  Joint AMS-MAA National Meetings,
  Special Session on Analytic Number Theory, New Orleans, Louisiana.
- March 2001, *Number Theory and Partitions* (1 hour address)
  AMS Central Sectional Meeting, Lawrence, Kansas.
- May 2001, *The Chebotarev Density Theorem and Modular Forms,* (40 minute talk)
  Joint AMS-SMM International Meeting, Morelia, Mexico.
- August 2001, *Ramanujan's work on partitions and allied functions,*
  MAA MathFest, Madison, Wisconsin.
- September 2001, U. S. delegate,
  4th Annual Chinese-American Frontiers of Science Symposium,
  Co-sponsored by: The Chinese Academy of Sciences and the U. S. National Academy of Sciences, Jade Palace, Beijing, China.
- September 2001, *Coefficients of half-integral weight modular forms* (1 hour speaker),
  Galois Theory and Modular Forms,
  Tokyo Metropolitan University, Tokyo, Japan.
- March 2002, *Arithmetic of Borcherds exponents*,
  AMS Special Session on Number Theory, Atlanta, Georgia.

- April 2002, *Points on curves: Let's win* \$1 *million*, (1 hour speaker), MAA Sectional Meeting (Ripon College).
- May 2002, *Modular forms* (40 minute speaker) 7th Meeting of the Canadian Number Theory Association, Montreal, Canada.
- July 2002, *Ramanujan's legacy* (1 hour speaker) Number Theory, Clemson, South Carolina.
- October 2002, *Frontiers in Number Theory,* (Chair and Speaker) 5th annual Chinese-American Frontiers of Sciences Symposium, (Co-sponsored by: Chinese and U. S. National Academy of Sciences, Irvine, California.
- October 2002, *Class groups and Shafarevich-Tate groups,* AMS Special Session on Analytic Number Theory, Salt Lake City, Utah.
- December 2002, *Class groups and Shafarevich-Tate groups* (2 hour speaker) Modular forms: KIAS, Seoul, Korea.
- January 2003, *Singular moduli and class equations* (45 minute speaker) AMS Special Session on Modular forms, Joint AMS-MAA Annual Meeting, Baltimore.
- May 2003, *Congruences for partitions* (40 minute speaker) AMS Special Session on Partitions and q-series, San Francisco, California.
- June 2003, *The Web of Modularity* (main speaker), CBMS Conference, Urbana, Illinois.
- November 2003, *Modularity and the trace formula* (1 hour speaker), Arithmetic and Geometry of Algebraic Varieties, Fields Institute, Toronto, Canada.
- December 2003, *Class groups and Shafarevich-Tate groups* (40 minute speaker), Joint International AMS-India Mathematics Meeting, Bangalore, India.
- January 2004, Eight lectures, Number Theory Camp, Pohang, Korea.
- April 2004, *Traces of Hecke operators and Jacobi polynomials* (1 hour speaker), Conference in Honor of George E. Andrews' 65th Birthday, Penn State University.
- August 2004, Two lectures, Algebra Symposium, Sendai, Japan.
- August 2004, Two lectures, The Birch and Swinnerton-Dyer Conjecture, Chonbuk, South Korea.
- September 2004, *Elliptic curves*, Packard Foundation Meeting, Monterey, California.
- September 2004, *Traces of singular moduli*, NSF FRG Conference, Madison, Wisconsin.
- October 2004, AMS Special Session on 'Special functions, orthogonal polynomials, and their applications', Evanston, Illinois.
- October 2004, Midwest Number Theory Conference (plenary speaker), *Traces of singular moduli*, University of Chicago.
- November 2004, Additive Number Theory (plenary speaker), *Values of modular functions*, University of Florida.
- December 2004, Arithmetic Algebraic Geometry, *Singular moduli*, Montreal, Canada.
- February 2005, Interuniversity Mathematical Research Seminar of Puerto Rico (2 plenary talks), Mayaguez, Puerto Rico.
- June 2005, Celebration of Gauss and Dirichlet, *Traces of singular moduli*, Göttingen, Germany.
- July 2005, Bretton Woods Workshop on Multiple Dirichlet Series, *Traces of singular moduli*

and Maass-Poincarè series, Bretton Woods.

- October 2005, NSF FRG Conference, *Traces of singular moduli*, University of Maryland.
- November 2005, Number Theory and Partitions, University of Puerto Rico, Mayaguez.
- December 2005, *Mock theta functions*, International Conference on Number Theory and Mathematical Physics, Kumbakonam, India.
- January 2006, *Arithmetic of Maass-Poincarè series*, Special Session on Arithmetic Geometry, Joint AMS-MAA Meeting, San Antonio, Texas.
- April 2006, *Legacy of Euler, Ramanujan and Dyson*, Hudson River Ungraduate Mathematics Conference, Westfield State College, Massachusetts.
- April 2006, *Legacy of Euler, Ramanujan, and Dyson*, MAA Sectional Meeting.
- April 2006, *Mock theta functions* and *Traces of singular moduli on Hilbert modular surfaces* (2 talks), AMS Sectional Meeting, San Francisco.
- June 2006, *Mock theta functions*, International Conference on Number Theory, KIAS, Seoul, Korea.
- July 2006, *Mock theta functions*, 9th Meeting of the Canadian Number Theory Association, Vancouver, Canada.
- October 2006, *The final problem*, Harvey Mudd College Conference on Enumerative Combinatorics.
- October 2006, *Freeman Dyson's challenge for the future*, AMS Special Session on Number Theory, Salt Lake City, Utah.
- May 2007, *Eulerian series as modular forms*, Conference in Honor of Heini Halberstam's 80th Birthday, University of Illinois, Urbana-Champaign.
- May 2007, *Harmonic Maass forms as combinatorial series*, L-functions and automorphic forms on the occasion of Dorian Goldfeld's 60th birthday, Columbia University.
- May 2007, *Dyson's challenge for the future*, Combinatorial and Additive Number Theory, CUNR Graduate Center, New York.
- October 2007, *Mock theta functions*, Integers Conference.
- December 2007, *Heegner divisors and Maass forms*, SASTRA Ramanujan Prize Conference, Kumbakonam, India.
- January 2008, *Heegner divisors and derivatives of L-functions*, Special session on Number Theory, AMS Joint Meetings, San Diego.
- January 2008, *Freeman Dyson's challenge for the future*, Special session on automorphic forms, AMS Joint Meetings, San Diego.
- March 2008, *Lecture Series*, Conference on partitions, q-series, and number theory, University of Florida.
- July 31-August 2, 2008, *The Legacy of Ramanujan's tau-function*, MAA MathFest, Madison, Wisconsin.
- November 20-21, 2008, *Two 1 hour lectures*, Current Developments in Mathematics, Harvard-MIT.
- December 2008, *q-series in topology*, Combinatory Analysis 2008: Partitions, q-series, and Applications, Penn State University.

- January 2009, *Harmonic Maass forms*, AMS Invited Address, Joint Meetings, Washington, DC.
- January 2009, *Hooks and infinite products*, MAA Invited Session Speaker, Joint Meetings, Washington, DC.
- March 2009, *Heegner divisors, L-functions and Maass forms*, Conference on Quadratic forms, University of Florida.
- March 2009, *Arithmetic properties of Ramanujan's mock theta function* $\omega(q)$, AMS Special Session on Partitions and q-series, University of Illinois, Urbana-Champaign.
- June 2009, *Generalized Borcherds products*, Conference on Number Theory, Carleton University, Ottawa, Canada.
- November 2009, *Generalized Borcherds products and two number theoretic applications*, Southern California Number Theory Day, Irvine, California.
- December 2010, *Number Theory in 2010*, SASTRA Prize Conference, Kumbakonam, India.
- January 2010, "Applying for Jobs", AMS Committee on the Profession Panelist, Joint Math Meetings, San Francisco.
- March 2010, *Mock modular forms*, AIM Workshop on Mock modular forms, Palo Alto.
- April 2010, *Unearthing the visions of a master: The legacy of Ramanujan*, MAA Conference, Harvey Mudd College, Claremont, California.
- July 11-16, 2010, Public Lecture and a Plenary Lecture, Canadian Number Theory Association Conference XI, Nova Scotia.
- September 21, 2010, *Mock modular periods*, Athens-Atlanta Number Theory Seminar, University of Georgia.
- January 21, 2011, *Adding and counting*, Emory University.
- February 8, 2011, *Adding and counting*, US Naval Academy.
- February 19-20, 2011, *Adding and Counting*, PANTS Conference, Clemson, South Carolina.
- March 8, 2011, *Adding and Counting*, Columbia-CUNY-NYU Distinguished RTG Lecture.
- March 14-17, 2011, *Adding and Counting*, International Conference on q-series, partitions and special functions, Statesboro, Georgia.
- April 23, 2011, $-\infty$ *to* ∞, TEDxEmory.
- May 18-20, 2011, *Paul Cohen Distinguished Lectures*, University of Chicago.
- September 19-23, 2011, *Adding and counting*, Annual Meeting of the DMV, Cologne, Germany.
- October 26-29, 2011, *Adding and counting*, Integers 2011.
- March 2012, AMS Sectional Meeting, U. Hawaii.
- March 2012, Number Theory Conference, U. Hawaii.
- June 18-21, 2012, *Adding and Counting*, SIAM Discrete Mathematics 2012, Halifax, Nova Scotia.
- August 2012, *Combinatorics and Number Theory*, School on Contemporary Mathematics, Ecole Normale Superieur de Lyon, France.
- October 2012, AMS Erdös Memorial Lecture.

- November 5, 2012, Ramanujan's 125th Birthday Conference, University of Florida.
- December 12-14,2012, The works of Srinivasa Ramanujan and related topics, Mysore, India.
- December 15-16, 2012, SASTRA Ramanujan Conference, Kumbakonam, India.
- December 2012, Ramanujan 125, New Delhi, India.
- January 11-12, 2013, Joint Math Meetings (in particular, Special Session on Ramanujan).
- March 2013, Conference in Honor of Winfried Kohnen, Darmstadt.
- March 2013, Arizona Winter School, Tucson, Arizona.
- April 2013, Johns Hopkins University.
- July 2013, Conference in Honor of Frits Beukers, Utrehct.
- August 2013, Mock modular forms, Moonshine, and string theory, Simons Center for Geometry and Physics.
- December 2013, Conference in Honor of T. Ono, Osaka, Japan.
- December 2013, Conference on Elliptic curves, Kanazawa, Japan.
- April 2014, Conference in Honor of Winnie Li, LSU.
- December 2014, SASTRA Ramanujan Prize Conference, Kumbakonam, India.
- January 2015, MAA Plenary Invited Address, Joint Math Meeting, San Antonio, Texas, 2015.
- February 2015, Bay Area Arithmetic Geometry Conference, Stanford.
- February 2015, TEDx Emory, Atlanta, Georgia.
- March 2015, Modular invariance, Max Planck, Bonn.
- April 2015, How not to suck as a graduate advisor, Tufts University.
- May 2015, Automorphic forms, Luminy, France.
- July 2015, International Mathematical Olympiad, Thailand.
- July 2015, 70th Birthday Celebration for John Coates, Sanya, China.
- August 2015, Strings, mock modular forms, and Moonshine, Durham, England.
- October 2015, Kennesaw Mountain Undergraduate Mathematics Conf, Kennesaw, Georgia.
- December 2015, SASTRA Ramanujan Prize Conference, Kumbakonam, India.
- March 2016, Number Theory in Honor of K. Alladi's 60th Birthday, University of Florida.
- April 2016, TORA Conference, University of North Texas.
- May 2016, Rome Film Festival.
- Books for Africa, Atlanta.
- August 2016, Modular Forms and Elliptic Curves, University of Connecticut.
- August 2016, Simons Center, "Mock modular forms and Moonshine".
- September 2016, AJC Decatur Book Festival.
- September 2016, BIRS "Modular forms and string theory".
- October 2016, MAA Polya Lecture, Purdue University.

- October 2016, IAAC Literary Festival, NYU, New York.
- October 2016, MAA Distinguished Lecture, Carriage House, Washington DC.
- October 2016, Eaves Distinguished Lecture, University of Kentucky.
- October 2016, White House STEM.
- November 2016, International Center for Theoretical Physics, Trieste, Italy.
- November 2016, Discovery Lecture Series, University of British Columbia.
- November 2016, Distinguished Lecture, Pacific Inst. for the Mathematical Sciences, Vancouver.
- January 2017, Math For America Lecture.
- February 2017, NSF "Big Ideas" Distinguished Lecture, Arlington.
- February 2017, MAA Spring Conference, State College of Florida, Bradenton, Florida.
- March 2017, MAA Southeastern Sectional Meeting, Macon, Georgia.
- March 2017, MAA Central Sectional Meeting, Nebraska.
- April 2017, Phi Beta Kappa "Cities of Distinction Ceremony", Atlanta.
- May 2017, Abel Prize Ceremony, Oslo, Norway.
- May 2017, Modular Forms are Everywhere, Max Planck Institute, Bonn, Germany.
- November 2017, AMS Arnold Ross Lecture, Orlando.
- January 2018, Oregon Number Theory Days, Oregon, State.
- April 2018, MAA Polya Lecture, Penn State at Erie.
- April 2018, AMS Western Sectional Meeting, Portland, Oregon.
- May 2018, Congressional Briefing, Washington DC.
- June 2018, Frontiers of Science, US National Academy of Sciences.
- June 2018, Combinatory Analysis 2018: Conference in Honor of George Andrews' 80th Birthday, Penn State.
- July 2018, Canadian Number Theory Association Conference, Quebec, Canada.
- July 2018, Frontiers of Mathematics, Hong Kong University.
- September 2018, Number Theory, Max Planck Insitute, September 10-14, 2018.
- October 2018, Centenary Celebration of Ramanujan's Election as Fellow of the Royal Society, London.
- November 2018, Modular forms and function fields, CRM, Pisa Italy.
- March 2019, Low dimensional topology and number theory, Osaka, Japan.
- March 2019, Number Theory, University of Hawaii.
- March 2019, AMS Special Session on Modular Forms, Honolulu, Hawaii.
- April 2019, Vertex Algebras in Mathematics and Physics, SUNY, Albany.
- May 29- June 1, 2019, Association of Christians in the Mathematical Sciences, Fort Wayne, Indiana.
- June 6-9, 2019, The Legacy of Ramanujan: A Conference in Honor of Bruce Berndt's 80th

Birthday, Urbana, Illinois.

- June 2020, ANAND International Science Lecture Series.
- June 2020, Vigyan Prasar Science Forum.
- July 2020, Number Theory Web Zoom Seminar.
- August 2020, International Web Conference on Mathematics, Bannari Amman Institute of Technology.
- October 2020, "q-series, quantum modular forms and representation theory", Two Part Lecture Series in the Conference, University of Kyoto (Virtual).
- October 2020, AMS Fall Sectional Meeting, Penn State (Virtual).
- December 2020, Modular Forms, National Centre for Mathematics, Mumbai.
- December 2020, International Conference on Special Functions and Applications
- December 2020, Ramanujan Mathematical Society.
- January 2021, Joint Mathematics Meeting, Washington, DC (including an AMS Special Session in Memory of Dick Askey).
- March 2021, Analytic and Combinatorial Number Theory in Honor of R. Balasubramanian's 70th Birthday.
- March 2021, MAA Sectional Meeting, University of Louisville.
- April 2021, National Mathematics Festival, Panel and Film Screening.
- September 2021, Indian Mathematics Teacher Association Annual Meeting (Virtual).
- October 2021, Ramanujan 101, Westmont College, Santa Barbara.
- September 2021, STEMS 2021,(Virtual) Plenary Lecture, Chennai Mathematics Institute, Chennai, India.
- October 2021, International Conference on class groups, Kerala School of Mathematics.
- December 2021, Starring Math, Museum of Mathematics.
- December 2021, SASTRA Ramanujan Prize Conference (Virtual).
- December 2021, R. P. Agarwal Memorial Lecture, Kerala School of Mathematics.
- January 2022, Simons Collaboration on Arithmetic Geometry, Number Theory, and Computation Annual Meeting.
- February 2022, Phi Beta Kappa Lectures, University of the South.
- April 2022, University of Virginia College Foundation (Washington DC Chapter).
- May 2022, Lance Fest, Baylor University.
- June 2022, Story Collider: The Proton Prom, New York, New York.
- August 2022, New connections between Number Theory and Physics, Newton Institute, Cambridge University.
- September 2022, Andrew Granville is 60, Centre Recherche Monreal, Montreal, Canada.
- October 2022, Phi Beta Kappa Lectures, University of Hawaii.
- October 2022, MAA Distinguished Lecture (Virtual).

- October 2022, Book Reading for Asian Americans and Pacific Islanders in Scientific Publishing (sponsored by Springer-Nature).
- October 2022, SUMS Conference, Plenary speaker.
- November 2022, Phi Beta Kappa Lectures, University of South Carolina.
- November 2022, International Conference on Class Groups of Number Fields and Related Topics, Kerala Mathematics Institute.
- December 2022, Algebraic Number Theory, Research Institute for the Mathematical Sciences, Kyoto, Japan.
- February 2023, Conference on Strengthening Community in Research Mathematics, Pomona College.
- March 2023, Number Theory, Tokyo Institute of Technology.
- April 2023, MAA New Jersey Meeting, Kean University.
- April 2023, Olympic Training Center, Colorado Springs.
- May 2023, Asian American and Native Hawaiian and Pacific Islander Heritage Month Celebration, National Science Foundation.
- July 2023, U. Michigan REU.
- July 2023, World Swimming Championships, Fukuoka, Japan.
- September 2023, Dynamics and Asymptotics in Algebra and Number Theory, Bielefeld, Germany.
- September 2023, Modular forms and Arithmetic Geometry, Darmstadt, Germany.
- October 2023, Keynote Address, Darden School of Business, University of Virginia.
- October 2023, PANTS XXXVI: Conference in Memory of Kevin James, Clemson University.
- November 2023, Rotunda Dome Room Dinner Keynote Speaker, University of Virginia.
- January 2024, Joint Mathematics Meeting, San Francisco.

  AMS Special Session in Memory of Kevin James.

  AMS Special Session on "Partitions and q-series".
- March 2024, International Conference on Modular forms and q-series, Cologne, Germany.
- April 2024, New Mexico Mathematical Association of Two Year Colleges.
- April 2024, AMS Spring Sectional Meeting, Washington DC.
- June 2024, The Legacy of Ramanujan: Celebrating the 85th birthdays of George Andrews and Bruce Berndt, Penn State University.
- June 2024, Math in the Mountains, Jackson Hole, Wyoming.
- November 2024, International Conference on Class Groups and Related Topics, Assam, Indian.
- December 2024, Joint AMS-NZ Mathematics Society International Meeting, Auckland, New Zealand.
- January 2025, Recent Advances in the Mathematical Sciences, Andrha Pradesh, India.
- February 2025, Modular forms and multiple zeta values, Osaka, Japan.
- March 2025, Low dimensional topology and number theory, Osaka, Japan.

- April 2025, Gulf Swimming Coaches Conference, Galveston, Texas.
- May 2025, Sydney S. Negus Memorial Lecture, Virginia Academy of Science, Charlottesville.
- June 2025, Math in the Mountains, Jackson Hole, Wyoming.
- July 2025, Algebraic Number Theory, Daejon, South Korea.
- August 2025, US Olympic and Paralympic Performance Innovation Summit, Colorado Springs.
- September 2025, Geometry of Machine Learning, Harvard University.
- October 2025, Intl. Conf. on Class groups of number fields, Andrha Pradesh, India.
- January 2026, Joint Mathematics Meeting, Washington DC.
- Janaury 2026, High School Mathematics Education Summit, Washington DC.
- February 2026, Paris-Saclay Summit / Choose Science, Paris, France.
- March 2026, Modular forms and multiple zeta-values, University of Hawaii, Honolulu.
- April 2026, Congressional Briefing on AI in Education and Research, US Capitol.
- April 2026, Miller Institute Symposium, Santa Cruz Mountains.
- April 2026, The Human Algorithm in the Age of AI, SD Natural History Museum.
- July 2026, SIAM Annual Meeting, Plenary Lecture, Cleveland.
- July 2026, Heilbronn Institute for Mathematics Annual Conference, Bristol, UK.

Colloquia and Seminars:

- November 1992 *Modern number theory and the importance of modular forms*, University of Montana
- November 1992 *The arithmetic of modular forms*, Brigham Young University
- January 1993 *Modular forms and Galois representations*, University of Oregon
- February 1993 *The arithmetic of modular forms*, University of Northern Colorado
- July 1993 *On Fermat's Last Theorm*, (with Sinai Robins), University of Northern Colorado
- July 1993 *On Fermat's Last Theorem*, University of Montana
- October 1993 *Diophantine Equations and Modular forms*, SUNY, Brockport
- November 1993 *The arithmetic of modular forms*, University of Florida
- November 1993 *Superlacunary Euler Products*, The Pennsylvania State University
- May 1994 *Modular forms and number theory*, Kennesaw State College
- November 1994 *Elliptic curves, partitions, and representation theory via modular theta func-*

tions,
The Pennsylvania State University

- December 1994 *Lacunarity of modular forms, partitions and elliptic curves*,
University of Michigan at Ann Arbor
- February 1995 *Parity of the Fourier coefficients of modular forms*,
Brown University
- June 1995 *Conjectures for Partition functions*,
University of Montana
- September 1995 *Congruences for arithmetic functions*,
CUNY Graduate School: New York Number Theory Seminar, New York.
- November 1995 *Partitions and existence of $t-$cores,*
Institute for Advanced Study-Princeton Univ-Rutgers Univ Number Theory Seminar
- December 1995 *Partitions, blocks and class numbers*,
Columbia University, New York, New York.
- February 1996 *Twists of elliptic curves*,
Center for Computing Sciences, Bowie, Maryland.
- April 1996 *Ramanujan's ternary quadratic form*,
San Francisco State University, San Francisco, California.
- April 1996 *Ramanujan's ternary quadratic form*,
Reed College, Portland, Oregon.
- May 1996 *Ramanujan's ternary quadratic form*,
University of Waterloo, Waterloo, Canada.
- May 1996 *Modular forms and the prime 2*,
University of Waterloo, Waterloo, Canada.
- November 1996 *Congruences and Diophantine equations,*
Temple University, Philadelphia, Pennsylvania.
- November 1996, *Congruences and Diophantine equations,*
Rutgers University, Newark, New Jersey.
- April 1997, *Congruences for the ordinary partition function,*
University of Illinois, Urbana.
- April 1997, *Ramanujan, 2719 and $L-$functions of elliptic curves,*
Bryn Mawr College and Haverford College Joint Colloquium.
- May 1998, *Divisibility of coefficients of modular forms and number theoretic applications,*
University of Maryland, College Park, Md.
- January 1999, *New results on the partition function,*
University of Maine, Orono.
- February 1999, *The partition function modulo m,*
University of Texas, Austin.
- March 1999, *The partition function and new applications,*
University of Wisconsin, Madison.
- February 2000, *Number Theory and partitions: The Legacy of Ramanujan and Dyson, and beyond,* Colgate University.

- February 2001, Talk # 1. *The number theory of partitions: The Legacy of Dyson and Ramanujan and Beyond*,
  Talk # 2. *Rational points on elliptic curves,*
  Prospects in Mathematics, Utah State University.
- March 2001, *The arithmetic of Borcherds exponents and p-adic modular forms*,
  Vermont-McGill Number Theory Seminar, Montreal, Canada.
- March 2001, *Ramanujan and Partitions*,
  MATC Mathematics Club, Madison, Wisconsin.
- March 2001, *Divisors of modular forms,*
  Department Colloquium, Boston College.
- April 2001, *Ramanujan, Dyson and Partitions*,
  Undergraduate Connecticut Valley Colloquium, Amherst College.
- April 2001, *Divisors of modular forms*,
  Department Colloquium, University of Massachusetts at Amherst.
- April 2001, *Divisors of modular forms*,
  Department Colloquium, Brown University.
- April 2001, *Ramanujan, Dyson and modular forms*,
  Undergraduate Mathematics Club Colloquium (DUG), Brown University.
- November 2001, *The Arithmetic of Modular forms*,
  Department Colloquium, University of Illinois at Urbana-Champaign.
- November 2001, *Modular forms*,
  Department Colloquium, University of Georgia.
- February 2002, *Weierstrass points on $X_0(p)$*,
  Modular forms seminar, Harvard University.
- February 2002, *Newman's Conjecture for the Partition Function*,
  Combinatorics Seminar, University of Pennsylvania.
- March 2002, *The Number Theory of Partitions*,
  Department Colloquium, Clemson University.
- April 2002, *The values and divisors of modular forms*,
  Department Colloquium, Penn State University.
- May 2002, *Points on Curves: Let's Win $ 1 million*,
  Wisconsin Talent Search Honors Day.
- June 2002, *p-adic modular forms and infinite products,*
  Number Theory Seminar,
  University of Illinois at Urbana-Champaign.
- November 2002, *Let win* $1 *million*, MATC Math Club Lecture.
- November 2002, *Groups associated to quadratic fields and elliptic curves*,
  Departmental Colloquium, University of Pennsylvania.
- February 2003, *Arithmetic of singular moduli*,
  Number Theory Seminar, Columbia University.
- March 2003, Milton Brockett Porter Lectures, Rice University.
- April 2003, *Number Theory of Partitions,* University of Chicago.

- September 2003, *Groups associated to quadratic fields and elliptic curves,* Department Colloquium, Penn State University.
- November 2003, Number Theory: The legacy of Dyson, Euler, and Ramanujan, Northwestern University.
- December 2003, Class groups and Elliptic curves, Department Colloquium and two seminars, Texas A & M University.
- December 2003, Class groups and Elliptic curves, Department Colloquium and one seminar, Columbia University.
- January 2004, Ramanujan, Dyson, and Partitions, Colloquium, Harvey Mudd College.
- April 2004, Groups and curves, Department Colloquium, Indiana University.
- June 2004, Properties of singular moduli, Number Theory Seminar, ETH, Zurich, Switzerland.
- June 2004, Linear relations for coefficients of modular forms, Number Theory Seminar, Renyi Institute, Budapest, Hungary.
- November 2004, F. Wendell Miller Lecture, Iowa State University.
- April 2005, Singular moduli, Johns Hopkins University.
- April 2005, Hilbert modular surfaces, Brown University.
- April 2005, Number theory and Dyson's crank, Brown University.
- May 19, 2005, Conversations with Larry Meiller, Wisconsin Public Radio.
- June 2005, Number Theory of Partitions, Miami University of Ohio.
- Sepember 2005, Two talks (Dept. Colloquium and Undergrad Math Club talk), Purdue University.
- November 2005, Three talks, Stanford University.
- November 2005, *The number theory of partitions*, MATC Math Club Lecture.
- December 2005, Two lectures, Front Range Number Theory Colloquium, Colorado State University, Fort Collins, Colorado.
- February 2006, Winifred Asprey Distinguished Lecturer (2 lectures), Vassar College.
- March 2006, Department Colloquium, *Freeman Dyson's challenge for the future: The mock theta functions*, University of Arizona.
- March 2006, 4 lectures, University of Iowa.
- May 2006, Conversations in Science, 1 hour television special, Madison Channel 10.
- June 2006, *The Birch and Swinnerton-Dyer Conjecture*, Miami University of Ohio.
- September 2006, Department Colloquium and Number Theory Seminar, University of South Carolina, South Carolina.
- September 2006, Department Colloquium and Number Theory Seminar, College of Charleston.
- November 2006, Lecture, University of Hawaii.
- December 2006, Colloquium and Number Theory Seminar, UCSD.
- December 2006, Number Theory Seminar, Stanford University.

- January 2007, Department Colloquium, Williams College.
- March 2007, 8 o'clock buzz, WORT Radio.
- March 2007, Distinguished Colloquium, University of Wyoming.
- September 2007, Department Colloquium, University of Montana.
- October 2007, University College, Dublin, Ireland (public lecture and colloquium).
- October 2007, Brigham Young University, Department Colloquium.
- October 2007, Amherst College, Number Theory Seminar.
- October 2007, MIT, Number Theory Seminar.
- April 2008, Cherokee Middle School, Math Day.
- April 2008, Wisconsin International Film Festival, Lecture accompanying the showing of the Spanish film "Fermat's Room".
- April 2008, "Here on Earth", radio show, Wisconsin Public Radio.
- April 2008, University of Northern Iowa, Hari Shankar Lecture Series.
- April 2008, Texas A&M, Maxson Lecture Series.
- September 2008, University of Illinois, Number Theory Seminar, and Department Colloquium.
- October 2008, Gentry Lectures, Wake Forest University.
- November 2008, U. Arizona.
- November 2008, Prosser Lectures, Dartmouth College.
- November 2008, Harvard-MIT Current Developments in Mathematics Plenary Lecturer (2 one hour lectures).
- January 2009, University of Chicago.
- January 2009, U. Pennsylvania Colloquium and Undergrad colloquium.
- February 2009, College of Charleston.
- February 2009, Distinguished Visiting Lecturer, University of Hawaii.
- April 2009, Johns Hopkins University, George Kempf Distinguished Lectures.
- April 2009, Filmed a piece on number theory, Teaching Company, Chantilly, Virginia.
- April 2009, University of Illinois at Chicago, Oliver Atkin Memorial Lecture Series.
- May 2009, U. Barcelona.
- November 2009, Boston College-MIT Number Theory Seminar.
- December 2009, University of Hawaii at Hilo, University Wide Lecture.
- December 2009, Stanford University.
- C. S. Subramaniam Memorial Lecture, Chennai, December 2009.
- February 2010, Emory University.
- April 2010, Distinguished Lecture Series, UCLA.
- September 2010, Fort Meade, NSA.
- September 2010, Allegheny College.

- October 2010, Georgia Tech Colloquium.
- October 2010, Yale Colloquium and Number Theory Seminar and Undergraduate Colloquium.
- November 2010, Lecture, University of the Virgin Islands, St. Thomas.
- February 2011, Julian Clancy Frazier Lecture, US Naval Academy.
- April 2011, Colloquium, Tulane University.
- May 2011, Maine Number Theory Seminar, Bates College.
- May 2011, Paul Cohen Distinguished Lectures, University of Chicago.
- November 2011, UC Berkeley Mathematics Colloquium.
- November 2011, Georgia State University.
- January 2012, Isidore and Hilda Dressler Lectures, Kansas State University.
- February 2012, Wesleyan University Colloquium and Seminar.
- February 2012, Colloquium, University of Puerto Rico, San Juan.
- February 2012, Marian Miner Cook Athenaeum Lectures, Claremont McKenna College.
- March 2012, Science Rocks-Science Matters, National Science Teachers Association National Meeting, Indianapolis.
- April 2012, Distinguished Lecture Series, Georgia Southern University.
- November 2012, UC Berkeley Mathematics Colloquium.
- November 2012, Stanford University, Number Theory Seminar.
- November 2012, Clanton Lectures, Furman University.
- October 2013, MIT.
- October 2013, Harvard.
- November 2013, Penn State, Maass Colloquium, and Math Department Colloquium.
- November 2013, DePaul University Colloquium.
- November 2013, Georgia Tech.
- December 2013, Oxford University.
- December 2013, Cambridge University.
- February 2014, University of Georgia Colloquium.
- March 2014, West Chester University.
- March 2014, University of Virginia.
- April 2014, Princeton University.
- April 2014, Institute for Advanced Study.
- August 2014, Emory Fall Convocation Faculty Speaker.
- September 2014, Duke University.
- September 2014, Seminar and Colloquium, U. North Carolina, Chapel Hill.
- November 2014, Georgia Tech Colloquium.

- November 2014, Seminar and Colloquium, U. Michigan, Ann Arbor.
- January 2015, Auburn University.
- February 2015, Colloquium, UC Santa Cruz.
- March 2015, Public Lecture, Trinity School, New York.
- April 2015, Gustavus Adolphus College, Colloquium and Public Lecture.e
- September 2015, Williams College, Oliver Lecture and the Class of 60's Lecture.
- September 2015, Amherst College, Number Theory Seminar.
- October 2015, Georgia State University, Colloquium.
- November 2015, Stanford Number Theory Seminar.
- November 2015, UC Berkeley Number Theory.
- February 2016, MIT Seminar.
- February 2016, Harvard Seminar.
- February 2016, Book Reading from "My Search for Ramanujan", Booksmith Brookline.
- March 2016, Nagle Lectures, University of South Florida.
- March 2016, Johns Hopkins University, Seminar and Film Screening.
- March 2016, The Man Who Knew Infinity Screening, Carter Center.
- April 2016, University of North Texas, Colloquium.
- April 2016, Math Lovers and TMWKI Screening, Stanford.
- April 2016, San Francisco Film Festival.
- May 2016, University of Oregon, Colloquium and Seminar.
- July 2016, Mathematical Encounter, Museum of Mathematics.
- September 2016, Vassar College.
- October 2016, Cal Tech Colloquium and Seminar.
- October 2016, Screen Actors Guild.
- October 2016, University of Kentucky.
- November 2016, Mt. Holyoke College.
- November 2016, Central Michigan University.
- February 2017, Texas Christian University, Green Lectures.
- January 2017, Duke University (Colloquium and Film screening).
- March 2017, Mathematics Across the Canon, St. Olaf and Carleton College.
- March 2017, Colloquium and Seminar, Texas A&M University.
- March 2017, Colloquium, SUNY Stonybrook.
- April 2017, LSU Porcelli Lectures.
- September 2017, Kieval Lectures, Humboldt State University.
- September 2017, Atle Selberg Lectures, Brigham Young University.

- October 2017, Colloquium, Canterbury University, New Zealand.
- October 2017, Public Lecture, Canterbury University.
- October 2017, Colloquium, University of Otago, New Zealand.
- October 2017, Public Lecture, University of Otago.
- October 2017, Colloquium, University of Auckland, New Zealand.
- October 2017, Public Lecture, University of Auckland.
- October 2017, Colloquium, Massey University (Auckland), New Zealand.
- October 2017, Public Lecture, Massey University (Auckland).
- October 2017, Colloquium, Waikato University, New Zealand.
- October 2017, Public Lecture, Waikato University.
- October 2017, Colloquium, Massey University (Palmerston North), New Zealand.
- October 2017, Public Lecture, Massey University (Palmerston North).
- October 2017, Colloquium, Victoria University, New Zealand.
- October 2017, Public Lecture, Victoria University.
- November 2017, Number Theory Seminar, Simon Fraser University, Vancouver.
- November 2017, Pacific Institute for Theoretical Physics, Vancouver.
- November 2017, Colloquium, University of British Columbia.
- November 2017, University of Central Florida, Orlando.
- December 2017, Norbert Wiener Lectures, Tufts University.
- December 2017, Sichuan University, Seminar and Colloquium.
- January 2018, Distinguished Lecture Series, Baylor University.
- March 2018, Simons Foundation Public Lecture, New York City.
- February 2018, Public Lecture, Dalton School, New York City.
- April 2018, Rutgers University, Colloquium.
- June 2018, Mathematical Frontiers (with Terry Tao), US National Academy of Sciences.
- September 2018, Bernard Society Lecture, Davidson College.
- September 2018, Auburn University, Colloquium.
- October 2018, Purdue University, Colloquium.
- October 2018, Oxford University, UK.
- November 2018, Colloquium, University of Virginia.
- March 2019, Michigan State, Distinguished Lecture Series.
- April 2019, Lecture Series, Texas Tech University.
- April 2019, SUNY Albany, Maheshwari Colloquium.
- April 2019, Institute for Advanced Study and Princeton University.
- September 2019, Rutgers University, Colloquium.

- September 2019, George Mason University, Colloquium.
- September 2019, Michigan Tech University, Colloquium.
- October 2019, Dalrymple Lecture, University of Mississippi.
- November 2019, Who wants to be a mathematician, Boston.
- December 2019, Indian Academy of Sciences Jubilee Professor Lecture Tour, (13 talks across India), University of Delhi, Anand University, Tata Institute for Fundamental Research, Indian Institute for Technology (Guwahati), Harish Chandra Research Institute, MES College, Ramanujan Mathematics Park, Indian Institute for Science, Chennai Mathematical Sciences Institute, SASTRA University.
- March 2020, NYU Courant Colloquium.
- April 2020, U. Florida Zoom Number Theory Seminar.
- May 2020, Vigyan Prasar National Zoom Seminar, India.
- June 2020, International Science and Technology Online Lecture Series, AICE.
- September 2020, St. Petersburg State University, Number Theory Seminar (Virtual).
- October 2020, Nueva School, San Mateo, California.
- November 2020, Trinity College Maths Society.
- February 2021, Public Lecture, Ahmedabad University.
- April 2021, Virginia Commonwealth Univ, Lecture Series (Public Lecture and Colloquium).
- May 2021, University of Cologne, Number Theory Seminar.
- September 2021, University of Cologne, Number Theory Seminar.
- September 2021, Colloquium, American University in Beirut.
- September 2021, Colloquium, University of Connecticut.
- October 2021, Colloquium, Howard University.
- November 2021, Number Theory Seminar, Indiana University.
- November 2021, Number Theory Seminar, IIT Guwahati.
- December 2021, Number Theory Seminar, University of Connecticut.
- December 2021, Department Colloquium, Cochin University, India.
- December 2021, Number Theory Seminar, IIT Rookree.
- February 2022, Number Theory Seminar, IIT Guwahati.
- February 2022, Mathematics Colloquium, University of Nevada at Reno.
- February 2022, Mathematics Colloquium, University of North Carolina (Chapel Hill).
- March 2022, Johannes Kepler University, RISC Institute Colloquium.
- March 2022, Johannes Kepler University, RISC Institute Seminar.
- March 2022, University of Puerto Rico, Francis N. Castro Montalvo Colloquium.
- March 2022, University of Puerto Rico, Computer Science Seminar.
- April 2022, Discover Science Lecture Series, University of Nevada, Reno.

- April 2022, Pi Mu Epsilon Lecture, University of Nebraska (Lincoln).
- August 2022, Seminar on Pure Maths, UNSW, Sydney, Australia.
- September 2022, "Using your UVa Degree in Arts and Sciences", UVa CATALYST Program.
- October 2022, University of Hawaii, Mathematics Colloquium.
- October 2022, Math Colloquium, UCLA.
- October 2022, Cal Tech, Number Theory Seminar.
- November 2022, University of Texas (Austin), Number Theory Seminar.
- November 2022, Phi Beta Kappa Lectures, University of South Carolina.
- November 2022, Number Theory Seminar, University of Michigan.
- January 2023, Special Seminar (Virtual), Mathematics Institute at Belgavi.
- February 2023, Colloquium, University College Dublin.
- March 2023, Public Lecture, Virginia Military Institute.
- March 2023, UC Berkeley, Number Theory Seminar.
- April 2023, Brigham Young University, Mathematics Colloquium.
- May 2023. Colloquium, University of Puerto Rico, Mayaguez.
- May 2023, University of Chicago.
- July 2023, U. Michigan REU Colloquium.
- July 2023, Algebra Colloquium, Kyushu University, Fukuoka, Japan.
- September 2023, Serge Lang Distinguished Lecture, UC Berkeley.
- January 2024, Michigan Tech Seminar.
- February 2024, Clifford Lectures, Tulane University.
- March 2024, IIT Guwahati, Number Theory Seminar.
- April 2024, New Mexico MAA Meeting.
- April 2024, Potomac Valley State College, Colloquium.
- April 2024, Moreton Lecture, Millsaps College, Jackson, Mississippi.
- April 2024, Arizona State University.
- April 2024, Mathematics Colloquium, University of Tennessee at Knoxville.
- April 2024, Bilecik Algebra & Number Theory Seminar, (virtual: from Istanbul, Turkey).
- May 2024, Langehop Lecture, Southern Illinois University.
- May 2024, Phi Beta Kappa Lecture, University of Chicago.
- September 2024, Mathematics Colloquium, U.S. Naval Academy.
- September 2024, Michigan Tech Seminar.
- October 2024, Mathematics Colloquium, University of Rome 3.
- November 2024, Atul Vyas Memorial Lecture, Claremont McKenna College.
- November 2024, Number Theory Seminar, University of Cologne.

- January 2025, LSU Colloquium.
- January 2025, Tulane University Colloquium.
- February 2025, Institute for Mathematics, Belagavi, India (virtual).
- April 2025, U. Virginia, NOVA.
- April 2025, Virginia Tech Mathematics Colloquium.
- April 2025, Coven-Wood Lectures, Wesleyan University.
- May 2025, Alumni Awards Speaker, University of Chicago.
- May 2025, Public Lecture and Seminar, U. Barcelona.
- May 2025, Seminar, U. Madrid.
- May 2025, Seminar for Founders Day, Institute for Advanced Study, Princeton.
- July 2025, Presidential Lectures, Okinawa Institute for Technology, Japan.
- October 2025, OpenAI, Mathematics Colloquium, San Francisco.
- October 2025, Swimming in Data, National Museum of Mathematics, New York City.
- November 2025, Mathematics Seminar, Institute for Defense Analysis, Bowie, Maryland.

<u>Other Professional Activities</u>:

- April 1994 Judge, 46^{th} Georgia Science and Engineering Fair, Athens, Georgia
- May 1994 Judge, International Science and Engineering Fair, Birmingham, Alabama
- July - August 1997 "Topics in Number Theory Conference", Co-organizer with G. Andrews, Penn State University.
- October 24-25, 1998 AMS Special Session on "*Partitions and q-series*", Co-organizer with S. Ahlgren and G. Andrews, State College, Pennsylvania.
- July 1998 Invited Lecturer, "National Youth Science Foundation"
- March 1999 Seaway Number Theory Conference, Co-organizer with S. Ahlgren, State College, Pennsylvania.
- July 1999
  Invited Lecturer and Group Study Leader, "National Youth Science Foundation"
  National Youth Science Camp, West Virginia.
- July 2000
  Invited Lecturer and Group Study Leader, "National Youth Science Foundation"
  National Youth Science Camp, West Virginia.
- October 26-28, 2000 "*q-series with Applications to Combinatorics, Number Theory and Physics*," Co-organizer with B. Berndt, Urbana, Illinois.
- May 2000 - April 2001 "*NSF50, Where Discoveries Begin*"
  Keynote scientist participating in the "Scientists and Engineers in the Schools" program.

- September 25-29, 2000 "*NSF50, Back to School Campaign*"
  One of ten keynote NSF award winning scientists chosen to promote science and engineering to middle school students nationwide.
- March 30-31, 2001 "Special Session on Number Theory", AMS Central Section Meeting,
  Co-organizer with C. Popescu and T. Yang,
  Lawrence, Kansas.
- May 2001 "*NSF50, Missoula, Montana Site Visit,*"
  Taught classes at Big Sky High School with Leon Lederman (1988 Nobel laureate in Physics).
- July 31- August 5, 2001 MAA Short Course: "Number Theory: The Legacy of Ramanujan",
  MAA MathFest, Madison, Wisconsin,
  Organizer.
- Member, Department Graduate Admissions Committee (2000 - present)
- Member, Department Hiring Committee (2001 - 2002).
- Member, College of Letters and Sciences,
  University of Wisconsin Undergraduate Curriculum Committee,
  September 2001- May 2004.
- Member of Organizing Committee,
  5th Annual Chinese-American Frontiers of Science Symposium
  Sponsored by the U.S. National Academy of Science and the Chinese Academy of Science.
- "Special Session on Arithmetic Geometry,"
  AMS Fall 2002 Sectional Meeting, Madison, Wisconsin,
  Co-organizer with Tonghai Yang.
- VIGRE Co-Chair with R. Brualdi, 2002-2003.
- VIGRE Co-Chair with A. Adem, 2003-2004.
- Organizer: NSF REU in Number Theory, June 13 - July 31, 2003.
- NEC Foundation Launch, September 23, 2003,
  National Press Club, Washington D. C.
- Invited speaker, Who wants to be a mathematician?, American Mathematical Society sponsored competition for high school students, April 16, 2004, Madison, Wisconsin.
- Graduate Coordinator, Department of Mathematics,
  University of Wisconsin (2004-2010).
- May 2004 "*NSF-NEC Extreme Science, Missoula, Montana Site Visit,*"
  Taught classes at Target Range Middle School with Leon Lederman (1988 Nobel laureate in Physics).
- VIGRE Co-PI along with A. Adem and P. Milewski (2004-present).
- Organizer: NSF REU in Number Theory, June - August, 2005.
- Member at Large, Council of the American Math. Soc, February 1, 2006- January 31, 2009.
- Organizer: UW Madison Mega Math Meet, May 2006 ($\tilde{1}$98 5th and 6th graders competed for prizes).
- Organizer: NSF REU in Number Theory, June-July 2006.
- Scientific Advisor, Davidson Institute, 2006, 2007.

- Chair, AMS Committee Evaluating Primary AMS Research Journals, 2006.
- Member, UW Madison Letters and Science Undergraduate Scholarship Committee, 2006-2007.
- Organizer: NSF REU in Number Theory, June-July 2007.
- Co-Chair (with Beverly Diamond), Committee on Publications, American Mathematical Society, February 2007-January 2008.
- Member, Advisory Board, Institute for Mathematics and Education, University of Arizona, 2007-present.
- Member, Letters and Science Student Academic Affairs Faculty Advisory Board, University of Wisconsin, 2007-2009.
- Chair, Committee on Publications, American Mathematical Society, February 1, 2008 - January 31, 2009.
- Associate Member, Pohang Mathematics Institute, POSTECH, South Korea.
- NSF REU Organizer, Summer 2008.
- Member of the American Mathematical Society's "Committee on Committees", January 31, 2009 - January 31, 2011.
- NSF REU Organizer, Summer 2009.
- Co-organizer (with Kathrin Bringmann and Sander Zwegers), 2010 AIM Workshop on mock modular forms.
- Member, Scientific Advisory Board, Banff International Research Station, 2009-present.
- Member, AMS Mathematics Research Communities Advisory Board, 2010-2013.
- Co-organized with K. Bringmann and S. Zwegers the American Institute for Mathematics (AIM) "Workshop on mock modular forms", March 2010.
- Member, U.S. National Committee for Mathematics, 2010-2022.
- Member, SASTRA Ramanujan Prize Committee, 2010-2011.
- Organized 2010 REU in Number Theory.
- Member, External Evaluation Committee of the Department of Mathematics at the University of Pittsburgh, 2011.
- Member, Department Graduate Admissions Committee, 2010-2011.
- Organized 2011 REU in Number Theory.
- Hiring Committee, Emory University 2011-2012.
- Member, Department Graduate Admissions Committee, 2011-2012.
- Member, Emory Scholars Undergraduate Admissions Committee, 2011-2012.
- Organized 2012 REU in NUmber Theory.
- Simons Foundations Grant Panelist, 2012.
- AMS Nominating Committee, 2013-2016.
- MAA Committee on the Status of the Profession, 2013-2016.
- Organized 2013 REU in Number Theory.
- Organized 2014 REU in Number Theory.

- 2014-2017, Emory University Honorary Degree Committee, Member.
- Organizer 2015 REU in NUmber Theory.
- 2015 Committee to Award Named and Chaired Professorships, Emory University.
- 2016-2019 AMS-MAA-SIAM Morgan Prize Committee.
- Organizer 2016 Emory REU in Number Theory.
- McMullan Award Committee 2016.
- Infinity Film Foundation, Board Member, 2016.
- Simons Foundation Conference Series (Co-organizer with John Duncan, Jeff Harvey, and Shamit Kachru), 2017-2019.
- AMS "Campaign for the Next Generation", Steering Committee, 2017-2-19.
- Organizer 2017 Emory REU in Number Theory.
- Co-organizer with George Andrews, Manjul Bhargava, and Bob Vaughan, Centenary Celebration of Ramanujan's Election as Fellow of the Royal Society, London.
- Vice President, American Mathematical Society, 2018-2021.
- Member, American Mathematical Society Committee on Publications, 2018-2021.
- U.S. Delegate, International Mathematical Union General Assembly, 2018 ICM.
- Senator, Faculty Senate, Emory University, 2018-2019.
- Advisory Board, Conference Board of the Mathematical Sciences, 2018-2023.
- Member, American Mathematical Society Ross Lecturer Selection Committee, 2019-2022.
- Member, Emory Undergraduate Research Committee, 2018-2019.
- Co-organizer with Amanda Folsom, Pavel Guerzhoy, and Masanobu Kaneko, AMS Special Session on "Modular forms", Honolulu, Hawaii.
- REU Organizer, Emory University, 2019.
- Member, Arnold Ross Lecture Committee, American Mathematical Society, 2019-2022.
- Member, Graduate Admissions Committee, University of Virginia, 2019-2020.
- Co-Chair, U. Virginia Department of Mathematics Hiring Committee, 2019-2020.
- Co-Organizer with E. Gazaki, AMS Special Session, 2020 Spring AMS Sectional Meeting.
- UVA REU Organizer, 2020.
- Kavli Institute for Theoretical Physics, Special Semester Organizer (with S. Gukov, S. Harrison, and J. Harvey), Fall 2020.
- Section Chair (Mathematics), American Association for the Advancement of Science, 2020-2023.
- UVA REU Organizer, 2021.
- Member, SASTRA Ramanujan Prize Committee, 2021-2022.
- E. H. Moore Prize Committee (Chair 2021-2024), American Mathematical Society, 2021-2027.
- 2022-2026 AMS-MAA-SIAM Morgan Prize Committee (recused in 2022 due to conflict of interest).

- 2021-present Advisory Board, Center for Advanced Mathematical Sciences at the American University in Beirut, Number Theory Research Unit.
- 2022-2026 AAAS-AMS Invited Address Selection Committee, Chair.
- UVA REU Organizer, 2022.
- 2022-2025 AMS Young Scholars Awards Committee.
- National Security Agency Advisory Board, (2022-present).
- "Algebraic Groups and Arithmetic Geometry" (conference planned for May 2023), Co-organizer with Valia Gazaki and Andrei Rapinchuk.
- Member of the Council of the American Association for the Advancement of Science, 2023-2024.
- Member and Vice President ('23-'25), Board of Trustees, Association of Members of the Institute for Advanced Study, 2022-2025.
- Member, UVA Faculty Well-Being and Wellness Liaison Board ('23-present).
- Member, UVA AI Administration Steering Committee ('23-present).
- Co-Director with Dean Christa Acampora (Graduate School and College of Arts and Sciences) and Dean Phil Bourne (School of Data Science) of UVA Futures Initiative ('23-present).
- Member of the Advisory Board of WTJU 91.1 FM ('23-present).
- Member, UVA Department of Mathematics Awards Committee ('24-'25); Senior Advisor to the Chair ('24-'25).
- Mathematical Sciences Education Board of the US National Academies (3/25-present).

Advising:

Post-doctoral Fellows and Visiting Assistant Professors:

- (1997-1999) Scott Ahlgren (Ph.D. 1996, U. Colorado)
  Present Position: Professor, University of Illinois at Urbana-Champaign
- (1998-1999) James Haglund - NSF Postdoctoral Fellow (Ph.D. 1995, U. Georgia)
  Present Position: Professor, University of Pennsylvania.
- (1997-2000) Kevin James (Ph.D. 1997, U. Georgia)
  Present Position: Professor, Clemson University.
- (1998-2000) David Penniston (Ph.D. 1998, U. Georgia).
  Present Position: Associate Professor, University of Wisconsin, Green Bay.
- (1998-2000) Matt Papanikolas (Ph.D. 1998, Brown U.).
  Present Position: Professor, Texas A & M Univ.
- (2000-2001) Jan Hendrik Bruinier (Ph.D. 1999, U. Heidelberg),
  Number Theory Foundation Postdoctoral Fellow,
  Present Position: Technische Universitt Darmstadt (Professor).
  Future Position: Professor, University of Bonn.
- (2000-2003) Jeremy Lovejoy (Ph.D. 2000, Penn State),
  NSF VIGRE - Van Vleck Assistant Professor,
  Present Position: Univ. Paris (Juissieu), Tenured CNRS Researcher.
- (2000-2002) Gwynneth Coogan (Ph.D. 1999, U. Colorado).
  NSF PECASE Postdoctoral Fellow.
- (2001-2003) William McGraw (Ph.D. 2001, U. Maryland).

Number Theory Foundation Postdoctoral Fellow,

- (2004-2007) Kathrin Bringmann (Ph.D. 2004, U. Heidelberg).
  Van Vleck Assistant Professor.
  Present Position: Professor, U. Cologne.
- (2007-2010) Amanda Folsom (Ph.D. 2006, UCLA).
  Van Vleck Assistant Professor and NSF Postdoctoral Fellow.
  Present Position: Professor, Amherst College.
- (2008-2010) Riad Masri (Ph. D. 2005, U. Texas, Austin)
  Van Vleck Assistant Professor (Co-advised by T. Yang).
  Present Position: Professor, Texas A&M U.
- (2010-2012) Zach Kent (Ph.D. 2010, U. Hawaii)
  Emory Fellow.
- (2015-2016) Michael Mertens (Ph.D. 2014, U. Cologne)
  Emory Postdoctoral Fellow.
  Present Position: Lecturer, University of Cologne.
  Future Position: Lecturer, RWTH Aachen University.
- (2019) David de Laat (Ph.D. 2014, Delft University of Technology)
  Emory Visiting Assistant Professor.
  Present Position: Assistant Professor, TU Delft.
- (2020-2023) Wei-Lun Tsai (Ph.D. 2020, Texas A&M)
  University of Virginia, Postdoctoral Fellow.
  Next Position. Tenure Track Assistant Professor, U. South Carolina.
- (2021-2022) Neelam Saikia (Ph.D. 2016, Indian Institute of Technology, Delhi)
  University of Virginia, Fulbright-Nehru Postdoctoral Fellow.
  Present Position: Assistant Professor, Indian Inst. of Technology at Bhubaneswar.
- (2023-2025) Ajit Singh (Ph.D. 2022, Indian Institute of Technology, Delhi)
  University of Virginia, Fulbright-Nehru Postdoctoral Fellow.
  Present Position: Assistant Professor, Indian Inst. of Technology at Dhanbad.

MA Students:

- Maki Murata: *q-series identities and the modularity of certain $K3$ surfaces,*
  Penn State M.A., Winter 1999.
  First Job: Panasonic, Tokyo Japan (Research Scientist).
- Claudia Alfes: *Congruences for Ramanujan's mock theta function $\omega(q)$*
  (Co-advisor: Aloys Krieg)
  U. Aachen, Winter 2009.
- Ethan Alwaise: *Inverting the j-function,* Emory University, M.A., 2017.
- Casia Siegel *Tamagawa products for elliptic curves,*
  University of Virginia, M.A., 2022.

PhD Students:

- Lawrence Sze: *On the combinatorial and number theoretic properties of (r, e)-core partitions,*
  Penn State Ph.D. - Spring 1998
  First Job: Cal Poly SLO (Tenure Track Assistant Professor).
- Jeremy Lovejoy: *Arithmetic and Combinatorial Properties of Partition functions*,
  Co-advisor: George Andrews,
  Penn State Ph.D. - Spring 2000.

First Job: Van Vleck Assistant Professor, University of Wisconsin.
Present Position: CNRS, U. Paris (Juissieu).

- Matthew Boylan, PhD student, University of Wisconsin,
  PhD. Summer 2002,
  First Job: NSF VIGRE Postdoctoral Fellowship,
  University of Illinois at Urbana-Champaign.
  Present Position: Associate Professor of Mathematics,
  University of South Carolina.

- Emre Alkan, PhD student, University of Wisconsin.
  UW Madison PhD. 2003,
  First Job: J. L. Doob Assistant Professorship,
  University of Illinois at Urbana-Champaign.
  Permanent Job: Associate Professor, Koc University, Istanbul, Turkey.

- Eric Mortenson, PhD student, University of Wisconsin.
  UW Madison PhD. 2003,
  First Jobs: Post doc, Max Planck Institute at Bonn,
  S. Chowla Assistant Professor, Penn State University.
  Postdoc Position: U. Queensland (Mentor: Ole Warnaar).
  Present Position: St. Petersburg State U. (Russia), Associate Professor.

- Ahmad El-Guindy, PhD Student, University of Wisconsin.
  UW Madison PhD. 2004,
  First Job: 3 year Assistant Professor,
  Texas A & M University.
  Present Job: Professor, U. Cairo, and TAMU Qatar.

- Rohit Chatterjee, PhD student, University of Wisconsin.
  UW Madison Ph.D. 2005,
  First Job: Analyst, Interactive Brokers, Greenwich, Ct.

- Holly Swisher, PhD Student, University of Wisconsin.
  Ph.D. 2005.
  First Job: VIGRE Ross Asst. Prof., Ohio State
  Present Job: Professor, Oregon State.

- Paul Jenkins, PhD Student, University of Wisconsin.
  Ph.D. 2006.
  First Jobs: NSF Postdoc and Hedrick Asst. Prof., UCLA,
  Professor, Brigham Young U.

- Jaclyn Anderson, PhD Student, University of Wisconsin. Ph.D. 2006.

- Karl Mahlburg, PhD Student, University of Wisconsin.
  Ph.D. 2006.
  First Job: C.L.E. Moore Instructor, MIT.
  Second Job: Postdoc, Princeton University.
  Present Position: Professor, LSU.

- Jayce Getz, PhD Student, University of Wisconsin.
  Ph.D. Summer 2007.
  First Job: Veblen Asst. Prof., Princeton U. & Inst. for Advanced Study.
  Present Job: Associate Professor, Duke University.

- Jeremy Rouse, PhD Student, University of Wisconsin.

Ph.D. 2007,
First Job: J. L. Doob Assistant Professor,
University of Illinois at Urbana-Champaign.
Professor, Wake Forest U.

- Sharon Garthwaite, PhD Student, University of Wisconsin.
  Ph.D. 2007,
  Present Job: Associate Professor, Bucknell University.

- Frank Thorne, PhD Student, University of Wisconsin.
  Ph.D. 2008,
  First Jobs: NSF Postdoc at Stanford (Mentor: K. Soundararajan), and
  Present Position: Associate Prof. at U. South Carolina.

- Robert Rhoades, PhD Student, University of Wisconsin.
  Ph.D. 2008,
  First Job: Postdoc, Ecole Poly. Federale de Lausanne (Mentor: P. Michel).
  Second Job: NSF Postdoc, Stanford (Mentor. A. Venkatesh).

- Matija Kazalicki, PhD Student, University of Wisconsin,
  Ph.D. 2010.
  First Job: University of Zagreb, Croatia.

- Christelle Vincent, PhD Student, University of Wisconsin,
  Ph.D. 2012,
  First Job: Postdoc at Stanford.
  Present Position: Associate Professor, U. Vermont.

- Robert Lemke Oliver, PhD Student, Emory University,
  Ph.D. 2013,
  First Job: NSF Postdoc at Stanford.
  Present Position: Associate Professor, U. Wisconsin (Madison).

- Larry Rolen, PhD Student, Emory University,
  Ph.D. 2013,
  First Job: Postdoc at U. Cologne.
  Present Position: Tenure Track Asst. Prof. at Vanderbilt U.

- Marie Jameson, PhD Student, Emory University.
  Ph.D. 2014,
  First Job: Associate Prof. at U. Tennessee at Knoxville.

- Michael Griffin, PhD Student, Emory University.
  NSF Graduate Fellow and National Physical Sciences Consortium Fellow,
  Ph.D. 2015,
  First Job: NSF Postdoc at Princeton.
  Present Position: Asst. Prof., Kennesaw State University.

- Jesse Thorner, PhD Student, Emory University,
  Ph.D. 2016,
  First Job: NSF Postdoc at Stanford.
  Present Position. Tenure Track Asst. Prof. at U. Florida and
  U. Illinois (Urbana-Champaign) beginning in August 2020.

- Amanda Clemm, PhD Student, Emory University.
  Ph.D. 2016,
  First Job: Consultant, McKinsey Consulting.

- Wenjun Ma, PhD Student, Shandong University.
  Ph.D. 2017 (Co-Advisedwith Guangshi Liu).
  First Job: Tianjin University.

- Olivia Beckwith, PhD Student, Emory University.
  Ph.D. 2018.
  First Jobs: Heilbronn Fellowship, University of Bristol
  J. Doob Assistant Professor, U. Illinois (Urbana-Champaign).
  Tenure Track Assistant Professor, Tulane University.

- Sarah Trebat-Leder, PhD Student, Emory University.
  Ph.D. 2018.
  NSF Graduate Fellow.
  First Job: CPO Art of Problem Solving.

- Robert Schneider, PhD Student, Emory University.
  Ph.D. 2018.
  Woodruff Fellow.
  First Job: Lecturer, University of Georgia.
  Current Job: Tenure Track Asst. Prof., Michigan Tech University.

- Ian Wagner, PhD Student, Emory University.
  Ph.D. 2019.
  First Job: Postdoc, Vanderbilt University.
  Current Job: Postdoc, University of Cologne.

- Madeline Locus Dawsey, PhD Student, Emory University.
  Ph.D. 2019.
  Present Position: Associate Professor, University of Texas, Tyler.

- William Craig, PhD Student, U. Virginia.
  Ph.D. 2022.
  First Job: Postdoc, University of Cologne.
  Current Job: Tenure Track Assistant Professor, US Naval Academy.

- Badri Vishal Pandey, PhD Student, U. Virginia.
  Ph.D. 2022.
  First Job: Postdoc, University of Cologne.

- Hasan Saad, Ph.D Student, University of Virginia.
  Ph.D. 2024.
  First Job: Postdoc, LSU.

- Eleanor McSpirit, Ph.D. Student, University of Virginia.
  Ph.D. 2024.
  First Job: Postdoc, Vanderbilt University.
  Tenure Track Assistant Professor, Cal Poly SLO.

- Kevin Gomez, Ph.D. Student, University of Virginia.
  Ph.D. 2026.

Selected Undergraduate Students:

- Yunseo Choi 2019 & 2022 REU participant
  Harvard University.
  2026 Morgan Prize winner

- Marie-Helene Tomè
  Duke University, 2023 REU Student

2024 Goldwater Scholar; 2025 Alice T. Schafer Prize Winner; 2025 Marshall Scholar.

- Catherine Cossaboom
  University of Virginia, 2023, 2022 REU Student
  2024 Goldwater Scholar; 2025 Marshall Scholar.
- Faye Jackson
  University of Michigan, 2023, 2022 REU Student
  2023 Schafer Prize Winner and 2024 Morgan Prize Winner.
- Jerry Lu
  University of Virginia, 2022, Research Intern
  MIT for Graduate School.
- Letong (Carina) Hong
  MIT, 2022, Alice T. Schafer Prize (Winner).
  2022 Rhodes Scholar and 2023 Morgan Prize Winner.
- Alexandra Hoey
  MIT, 2022, Alice T. Schafer Prize (Honorable Mention)
- Vanshika Jain
  MIT, 2021, Alice T. Schafer Prize (Honorable Mention)
- Ashwin Sah,
  MIT, 2021 Morgan Prize (Co-Winner).
- Jerry Lu
  University of Virginia (2020-2022), Research Assistant.
- Ashwin Sah
  MIT, 2020 Morgan Prize, Honorable Mention.
- Alice Lin
  Princeton University, 2020 Churchill Fellow.
- Ryan Chen,
  Princeton University, 2019 Churchill Fellow.
- Katherine Gallagher,
  Notre Dame University, 2019 Marshall Scholar.
- Naomi Sweeting,
  University of Chicago, 2019 Alice T. Schafer Prize.
- Nitya Mani,
  Stanford University, 2019 Alice T. Schafer Prize, Honorable Mention.
- Ashvin Swaminathan
  Harvard University and 2018 REU
  2018 Morgan Prize Winner.
- Xaviver Gonzalez,
  Harvard University, 2018 Rhodes Scholar.
- Ethan Alwaise,
  Emory University, 2017 Honors Thesis Student.
- Shuo Li,
  Emory University, 2017 Honors Thesis Student.
- Tessa Cotron,

Emory University, 2017 Honors Thesis Student.

- Letian Wang,
  Emory University, 2017 Honors Thesis Student.
- Andrew Wilson,
  Emory University, 2017 Honors Thesis Student.
- Hannah Larson,
  Emory REU Student and 2017 Schafer Prize Winner, 2024 Breakthrough Mirzakhani Prize.
- David Yang,
  Emory REU Student and 2017 Morgan Prize Winner.
- Meena Jagadeesan,
  Emory REU Student and 2016 Davidson Fellow.
- Yan Sheng
  Emory University, 2016 Honor Thesis.
- Sarah Pitman
  Emory University, 2014 Honors Thesis.
- Eric Larson
  Harvard University, 2014 Morgan Prize Winner.
- Sarah Peluse
  Univ. of Chicago, 2014 Alice T. Schafer Prize Winner, 2024 Breakthrough Mirzakhani Prize.
- Jiaqi Guo
  Emory University, 2013 Honors Thesis in Analytic Number Theory.
- Maria Monks
  MIT, REU 2008 participant
  Winner, 2009 Alice T. Schafer Prize, 2010 Morgan Prize runner-up, 2011 Morgan Prize Winner.
- Doris Dobi
  MIT, REU 2007 participant
  Runner up, 2009 Alice T. Schafer Prize
- Aaron Pixton
  Princeton, REU 2006 participant
  Winner, 2009 Morgan Prize Winner, 3 time Putnam Fellow.
- Alison Miller
  Harvard, REU 2006 participant
  Winner, 2008 Alice T. Schafer Prize.
- Brian Rice
  Harvey Mudd College, REU 2006 participant
  2007 Goldwater Scholar.
- Carl Erickson
  Stanford, REU 2006 participant
  2007 Churchill Fellow
- Yaim Cooper
  MIT, REU 2006 participant
  1st runner up, 2007 Alice T. Schafer Prize.
- Daniel Kane

MIT, 2006 Morgan Prize Winner, 3 time Putnam Fellow.

- Sam Lachterman,
  University of Wisconsin, Sophomore - Senior years (2004-2006).
- Rhiannon Schayer,
  Northwestern University, Junior (Summer 2004 and B.A. Thesis).
- Brendan Younger,
  University of Wisconsin, Senior (Summer 2004).
- Jayce Getz,
  Harvard University, (2001-2004).
- Jacklyn (Kohles) Anderson
  University of Nebraska, Summer 1999 REU Participant
  2001 Alice T. Schafer Prize Winner
- Rhiannon Weaver: *Finding new congruences for the partition function,*
  Penn State Honors Thesis (Spring 2000),
  2000 Schreyer Honors College Dean's Award for Research or Creative Achievement, Penn State University.

Selected High School Students:

- Yunseo Choi: 2021 Regeneron Science Talent Search, 1st place.
- Keenan Monks: 2010 REU participant, and 2010 Siemans Science Talent Search Semi-Finalist, 2010 International S.-T. Yau High School Mathematics Research, Honorable Mention (top 3 in US), 2011 Intel Science Talent Search (6th place).
- Matt Wage: 2007 REU participant, and Wisconsin Talent Search winner, 2008 Intel Science Talent Search Finalist (top 40, only finalist from Wisconsin).
- Sally Wolfe: 2007 REU participant, published a paper in *Involve*.
- Nick Wage: 2005 REU participant, and Wisconsin Talent Search winner, 2005 Finalist, Siemens-Westinghouse Science Competition (30 finalists nationwide), 2006 Intel Science Talent Search Finalist (4th place overall).
- Daniel Kane: 2003 USA International Mathematics Olympiad Team Member and IMO Gold Medalist, Winner of 2003 Davidson Foundation Fellowship $50, 000, published three research papers.
- Daniel Kane: 2002 USA International Mathematics Olympiad Team Member and IMO Gold Medalist.
- Daniel Kane: Alternate, 2001 USA International Mathematics Olympiad Team.
- Jayce Getz: 2nd place ($75,000) - 2000 Intel Science Talent Search
  (Note: This was formerly known as the Westinghouse Talent Search),
  2nd place overall, 2000 International Science and Engineering Fair,
  1st place in Mathematics, 2000 International Science and Engineering Fair.
- Brittany Kirkland: 1st place - 2000 Rocky Mountain Science Symposium,
  3rd place in Mathematics, 2000 International Science and Engineering Fair.
- Jayce Getz: Finalist - 1999 International Science and Engineering Fair.
- Jayce Getz: Finalist - 1998 International Science and Engineering Fair.
- Nick Eriksson: 3rd place $20,000-1997 Westinghouse Talent Search

2nd place in Mathematics-1997 International Science and Engineering Fair.

- Nick Eriksson: 2nd place in Mathematics -1996 International Science and Engineering Fair.
- Sarah Lord: 2nd place in Mathematics - 1994 International Science and Engineering Fair.
- Sarah Lord: 2nd place in Mathematics -1993 International Science and Engineering Fair.

Reviewing, Refereeing, Editorial Work, Advisory Boards etc.:

- 2024-present Member, Editor-in-Chief.
  The Ramanujan Journal.
- Member of Visiting Scholar Committee, Phi Beta Kappa, (2022-present).
- Editor, Electronic Journal of Combinatorics, (2021-2024).
- Editor, Hardy-Ramanujan Journal, (2022-present).
- Editor, Contributions to Discrete Mathematics, 2018-2024.
- Consultant, Notices of the American Mathematical Society, 2018-present.
- Associate Producer and Consultant, "The man who knew infinity" (Starring Jeremy Irons and Dev Patel), 2014-2015.
- Associate Editor, Royal Society Open Science (2015-2017).
- Correspondent, Mathematical Intelligencer (as of February 2015).
- Editor, Springer Graduate Texts in Mathematics (2015-2021).
- Editor-in-Chief, Research in Number Theory (as of August 2014).
- Editor, Annals of Combinatorics (as of March 2014).
- Editor-in-Chief, Research in the Mathematical Sciences (as of January 2014).
- Editor, Mathematics (January 2013-December 2017).
- Managing Editor,
  Proceedings of the American Mathematical Society (February 2010-January 2019).
- Member, Editorial Board,
  Journal of Combinatorics and Number Theory, February 2008-present.
- Associate Member, Pohang Mathematics Institute, POSTECH, South Korea.
- Member, Advisory Board,
  Institute for Mathematics and Education, University of Arizona, June 2007- present.
- Member, Editorial Board,
  International Journal of Modern Mathematics, March 2007-December 2017.
- Member, Editorial Board,
  Involve, August 2006-March 2024.
- Associate Editor, Book reviews for the Bulletin of the American Mathematical Society. 2005-2024.
- Member, Editorial Board,

Communications in Number Theory and Physics (2008-present).

- Member, Editorial Board,
Online Journal of Analytic Combinatorics,
January 2006 - 2017.
- Smithsonian Institution, Advisor, Science and Technology Forum, 2005-2007.
- NSA Advisory Panel, 2005-present.
- Member, Editorial Board,
Proceedings of the American Mathematical Society, June 2005 - January 2019.
- Member, Editorial Board,
International Journal of Number Theory January 2005 - March 2024.
- 2003-2024 Member, Editorial Board,
Integers.
- 2001-2024 Member, Editorial Board,
The Ramanujan Journal.
- 2000 NSF Grant Panelist.
- 2000-present Member, Editorial Board,
The International Mathematical Forum.
- 1995-present Reviewer of National Science Foundation (NSF) grants
- 1997, 2000, 2002 Reviewer for National Sciences and Engineering Research Council of Canada (NSERC) grants
- 1998-02 Reviewer of National Security Agency Grants
- 2003 NSF Grant Panelist.
- 2004 NSF Grant Panelist.
- 2006 NSA Grant Panelist.
- Referee work: Referee approximately 20 articles annually.
- Review work: Mathematical Reviews (1995-present)
- Review work: The Plenum Publishing Co., Addison- Wesley Publishing Co., Springer-Verlag.
- 1995 International Committee Member: Korea Science and Engineering Foundation

Professional Awards, Grants and Honors:

- 2025-2030 Simons Foundation ($42,000), SFI-MPS-TSM-00013279.
- 2025 Honorary Fellow of the Romanian Academy of Sciemces.
- 2025 PNAS Cozzareli Prize ("Paper of the Year" Finalist/Runner Up).
- 2024 Honorary Fellow of Phi Beta Kappa at the University of Chicago.
- 2024 Honorary Fellow of the Indian Academy of Sciences.
- 2023 Fellow of the Asian American Scholar Forum.
- 2022-2023 Jane Street ($15,000).
- 2023-2025 University of Virginia, College Faculty Fellow.

- 2023 NSA REU Grant ($125,000), H98230-23-1-0016.
- 2023, University of Chicago Alumni Award for Professional Achievement.
- 2022-2023 NSF Grant ($40,000), DMS-2305231.
  Conference on Arithmetic Geometry and Algebraic Groups
  co-PI with Valia Gazaki (co-PI) and Andrei Rapinchuk (PI).
- 2023-present Shannon Fellow, Shannon Center for Advanced Studies, University of Virginia.
- 2022-present Honorary Professor of the Math. Sciences Institute Belgavi, Karnakata, India.
- 2022-2026 NSF REU Grant ($415,796), DMS-2147273.
- 2022 NSA REU Grant ($125,000), H98230-22-1-0020.
- 2021-2026 NSF Standard Grant ($275,975), DMS-2055118.
- 2021 NSA REU Grant ($80,437), H98230-21-1-0059.
- 2020 University of Virginia Distinguished Spotlight Researcher Award.
- 2021-2025 Honorary Professor, Indian Institute of Technology, Guwahati.
- 2019 University of Virginia Research Award.
- 2020 NSA REU Grant ($80,000).
- 2020-2022 NSF REU Grant ($292,305), DMS 2002265.
- 2020-21 Phi Beta Kappa Distinguished Scholar.
- 2019, Rhodes Trust, Inspirational Educator Award.
- 2019, Popular Mechanics magazine's "Top Mathematics Breakthrough in 2019."
- 2019-2022, NSF REU Grant ($360,628).
- 2019, NSA REU Grant ($70,000).
- Member, Sigma Xi, 2018.
- Templeton World Charity Foundation Grant, 2018-2023, $550,000.
- Jubilee Professor, Indian Academy of Sciences, 2019.
- Prose Award (Best Scholarly Book in Mathematics), Association of American Publishers, 2018.
- DST International Film Festival, Best Film Prize, 2017.
- Eleanor Main Graduate Mentoring Award, Emory University, 2017.
- National Science Film Festival, Technical Excellence Award, 2017.
- AMS-NZMS Maclaurin Lectureship, 2017.
- Green Honors Lectures, TCU University, 2017.
- 2016-2019 NSF Standard Grant (co-PI: John Duncan), $355,000.
- 2016-2019 NSF REU Grant, $288,128.
- Templeton World Charity Foundation Grant, 2016-2018 $100,000.
- MAA Polya Distinguished Lecturer, 2016-2017.
- Discover magazine's 50th Best Science Story of 2015.
- 2015 Oliver Lecture and Class of 60s Lecture, Williams College.

- Discover magazine's 15th Best Science Story of 2014.
- 2014 Albert E. Levy Scientific Research Award.
- 2013-2016 NSF REU Grant (DMS 1250467), $324,000.
- 2012, Fellow of the American Mathematical Society.
- October 2012, AMS Erdös Memorial Lecture.
- April 2012, Distinguished Lecture Series, Georgia Southern U.
- February 2012, Marian Miner Cook Athenaeum, Claremont McKenna College.
- January 2012, Dressler Lectures, Kansas State U.
- September 2011, Plenary Address, DMV National Meeting, Cologne, Germany.
- May 2011, Paul Cohen Lectures, University of Chicago.
- February 2011, Julian Clancy Frazier Lecture, US Naval Academy.
- NSF Standard grant 2010-2014 (DMS 0964844), $285,000.
- Fall 2009, Honored Instructor Award, Division of University Housing, University of Wisconsin.
- Spring 2010, Distinguished Lecture Series, UCLA.
- December 2009, C. S. Subramaniam Memorial Centenary Lecture, Indian Institute of Technology, Chennai.
- NSF RTG Grant 2009-2014 (Ellenberg, Co-PI) (DMS 0838210) $1.3 million
- NSF REU Grant 2009-2011 (DMS 842560) $237,709.
- April 2009, George Kempf Distinguished Lectures, Johns Hopkins University.
- February 2009, Distinguished Visiting Lecturer, University of Hawaii.
- January 2009, AMS Invited Address, Joint AMS-MAA National Meeting, Washington, DC.
- November 2008, Plenary Lecturer, Harvard-MIT Current Developments in Mathematics Conference.
- November 2008, Prosser Lecturer, Dartmouth College.
- October 2008, Gentry Lecturer, Wake Forest University.
- June 2008, Named Hilldale Professor of Mathematics, University of Wisconsin at Madison.
- 2008, Maxson Lecture Series, Texas A&M University.
- 2008, Hari Shankar Distinguished Lecturer, University of Northern Iowa.
- 2007, Favorite Instructor Award, University of Wisconsin Residence Halls.
- 2007-2010, NSF Grant, $225,999.
- 2006, Winifred Asprey Distinguished Lecturer, Vassar College.
- 2006, Distinguished Visitor (4 lectures), University of Iowa.
- 2005, National Science Foundation Director's Distinguished Teaching Scholar Award, $305,000.
- 2005, F. Wendell Miller Lecturer, Iowa State University.
- 2004-2007 NSF FRG Grant, $333,000,
  Co-PI with (S. Kudla, T. Yang, and S. Zhang).

- 2004-2009 NSF VIGRE Grant, $2.5 million,
  Co-PI with (A. Adem and P. Milewski),
- 2004-2011 Solle P. and Margaret Manasse Professor of Letters and Science.
- 2003 John S. Guggenheim Foundation Fellowship.
- 2003 NSF REU Grant. $ 71991.
  DMS Grant 0243604.
- 2003 Milton Brockett Porter Lectures, Rice University.
- 2003 NSF-CBMS Distinguished Conference Lecturer.
- 2002 H. I. Romnes Fellowship. $50,000.
- 2000-2003 Number Theory Foundation Grant
  $51,000 for Jan Bruinier's and Bill McGraw's Postdoctoral Fellowship.
- Fall 2000, Prospects in Mathematics Lecture Series,
  Utah State University, Logan, Utah.
- 2000 Presidential Early Career Award for Scientists and Engineers
  DMS-0196355
  $500,000
- 1999 David and Lucile Packard Fellowship
  $625,000
- 1999-2000 Louis Martarano Professor of Mathematics,
  Endowed Chair for Junior Faculty at Penn State University.
- 1999-2001 Alfred P. Sloan Foundation Research Fellow
  $35,000
- 1998-2004 NSF CAREER
  DMS-9874947
  $200,000
- 1998 AMS-NSF Berlin ICM Travel Grant
  $1,950.
- 1997-1999 National Security Agency:
  Young Investigator
  $38,500 Grant Number MSPR-97Y012
- July - August 1997 "Topics in Number Theory Conference",
  Co-organizer with G. Andrews, Penn State University.

  National Science Foundation
  $10,000 Grant DMS 9711159

  Institute for Mathematics and its Applications Grant
  $3,000

  Penn State Continuing and Distance Education Grant
  $2,300
- 1995-1999 National Science Foundation
  Postdoctoral Fellow:

$75,000 Grant Number DMS-9508976

- 1994 AMS-NSF Zurich ICM Travel Grant
  $1,500.

Professional Positions:

- 12/2024-present — Consultant, Epoch AI.
- 12/2023-present — Professor Affiliate in Statistics, U. Virginia.
- 9/2023-present — Professor of Data Science by Courtesy, U. Virginia.
- 1/2023-present — STEM Advisor to the Provost, U. Virginia
  Fellow, Shannon Center for Advanced Studies at UVa.
- 8/2022-present — Marvin Rosenblum Professor of Math, U. Virginia.
- 8/2021-1/2023 — Chairman, Department of Mathematics, U. Virginia.
- 2019-2022 — Thomas Jefferson Professor of Mathematics
  University of Virginia.
- 2010-present — Asa Griggs Candler Professor of Mathematics
  Emory University.
- 2008 - 2011 — Hilldale Professor of Mathematics
  University of Wisconsin at Madison.
- 2004 - 2011 — Solle P. and Margaret Manasse Professor
  University of Wisconsin at Madison.
- April 2001 - July 2003 — Professor
  University of Wisconsin at Madison.
- July 1999 - April 2001 — Associate Professor
  University of Wisconsin at Madison
  (on leave for 1999-2000 academic year).
- September 1999 - November 2000 — Louis A. Martarano Professor of Mathematics
  Penn State University
- June 1997 - August 1999 — Assistant Professor
  Penn State University
- September 1995- May 1997 — Member
  Institute for Advanced Study, Princeton
  NSF Grant DMS-9304580
- September 1994- August 1995 — Visiting Assistant Professor
  University of Illinois at Urbana-Champaign
- August 1993- July 1994 — Visiting Assistant Professor
  The University of Georgia
- September 1991- August 1993 — Instructor
  Woodbury University, Burbank, California.