

Larry Rolen

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- Education**
- **Emory University**, Ph.D. Mathematics (2013).
Dissertation in number theory on “Maass Forms and Quantum Modular Forms”
Advisor: Ken Ono
 - **University of Wisconsin–Madison**, B.A. Mathematics with Honors (2011).
- Research Interests**
- Number theory, combinatorics, modular forms, arithmetic geometry, harmonic Maass forms.
- Employment**
- **Vanderbilt University**, Assistant Professor, 2018-present.
 - **Georgia Institute of Technology**, Visiting Assistant Professor, 2017-2018.
 - **Trinity College Dublin**, Assistant Professor, 2016-2018.
 - **The Pennsylvania State University**, Research Associate, 2015-2016.
 - **University of Cologne**, Postdoc, 2013-2015.
- Fellowships & Awards**
- Guest Program of Max Planck Institute for Mathematics: One month stay in June 2021.
 - AIM SQuaRE Workshop on Indefinite Theta Functions and moonshine, co-applied for and received funding for 3 annual workshops, 2018-2020.
 - Prose Award (Best Scholarly Book in Math), Association of American Publishers, 2018.
 - “Thank Your Lecturer!,” Trinity College Dublin, 2016.
 - NSF Graduate Fellowship, Fall 2012 and Spring 2013.
 - Woodruff Fellowship, Emory University, Fall 2011 and Spring 2012.
 - NSF REU in Number Theory, Emory University.
 - MAA Undergraduate Poster Session (Joint Math Meetings) Prize Winner, 2011.
 - Young Mathematicians Conference Outstanding Presentation, second place, 2010.
 - NSF REU in Combinatorics and Number Theory, Clemson University.
 - Frank D. Cady Scholarship, UW-Madison Mathematics Department, 2010.
 - Lawrence Young Memorial Scholarship, UW–Madison Mathematics Department, 2009.
 - VIGRE, NSF Undergraduate Research Grant, 2009.
- Grants**
- NSA Math Sciences Program conference grant, PI Luca Candelori, co-PIs Larry Rolen and Fang-Ting Tu, \$13,440 (initially accepted in August 2020, but the conference was delayed due to COVID-19, so this has been resubmitted with a revised period due to shifting the conference one year forward and is thus currently under review).
 - NSA Math Sciences Program conference grant, with Ian Wagner, \$10,500 (2020).
 - NSF conference grant, with Ian Wagner, \$7,500 (2020, submitted a no cost extension due to COVID-19).
 - SFI Conference & Workshop Programme Grant, with Jan Manschot, (€6,000), 2017.
 - University of Cologne Postdoc Grant (€60,000) duration 2 years, 2014.

Books

1. K. Bringmann, A. Folsom, K. Ono, and L. Rolen, *Harmonic Maass forms and mock modular forms:*

theory and applications, AMS Colloquium Series, 2017.

Publications

1. T. Anderson, L. Rolén, and R. Stoehr, *Benford's Law for Coefficients of Modular Forms and Partition Functions*, Proc. Amer. Math. Soc., **139** (2011), 1533–1541.
2. N. Amersi, J. Beyerl, J. Brown, A. Proffer, and L. Rolén, *Pullbacks of Siegel Eisenstein Series and Weighted Averages of Critical L-Values*, Ramanujan J., **27**, No. 2 (2012) 151–162.
3. L. Rolén, *A Generalization of the Congruent Number Problem*, Int. J. Number Theory, **7**, No. 8 (2011), 2237–2249.
4. E. Larson and L. Rolén, *Progress Towards Counting D_5 Quintic Fields*, Involve, **5**, No. 1 (2012), 91–97.
5. E. Larson and L. Rolén, *Upper Bounds for the Number of Number Fields with Alternating Galois Group*, Proc. Amer. Math. Soc., **141** (2013), 499–503.
6. E. Larson and L. Rolén, *Integrality Properties of the CM-values of Certain Weak Maass Forms*, Forum Math., **27**, No. 2 (2015), 961–972.
7. M. Griffin and L. Rolén, *On Matrices Arising in the Finite Field Analogue of Euler's Integral Transform*, Mathematics, **1**, No. 1 (2013), 3–8.
8. M. Griffin and L. Rolén, *Integrality Properties of Class Polynomials for Non-Holomorphic Modular Functions*, J. Ramanujan Math. Soc., **30**, No. 1 (2015), 83–99.
9. L. Rolén and R. Schneider, *A "Strange" Vector Valued Quantum Modular Form*, Arch. Math., **101** (2013), 43–52.
10. M. Griffin, K. Ono, and L. Rolén, *Ramanujan's Mock Theta Functions*, Proc. Natl. Acad. Sci. U.S.A., **110**, no. 15 (2013), 5765–5768.
11. V. Dose, N. Green, M. Griffin, T. Mao, L. Rolén, and J. Willis, *Singular Moduli for a Distinguished Non-Holomorphic Modular Function*, Proc. Amer. Math. Soc., **143**, No. 3 (2015), 965–972.
12. K. Bringmann, T. Creutzig, and L. Rolén, *Negative Index Jacobi Forms and Quantum Modular Forms*, Res. Math. Sci., **1** (2014), 1:11.
13. C. Alfes, M. Griffin, K. Ono, and L. Rolén, *Weierstrass Mock Modular Forms and Elliptic Curves*, Res. Number Theory, (2015) 1:24.
14. P. Guerzhoy, Z. Kent, and L. Rolén, *Congruences for Taylor Expansions of Quantum Modular Forms*, Res. Math. Sci., **1** (2014), 1:17.
15. K. Ono, L. Rolén, and S. Trebat-Leder, *Classical and Umbral Moonshine: Connections and p -adic Properties*, J. Ramanujan Math. Soc. **30**, No.2 (2015), 135–159.
16. K. Bringmann and L. Rolén, *Half-Integral Weight Eichler Integrals and Quantum Modular Forms*, J. Number Theory, special issue in honor of Winnie Li, **161** (2016), 240–254.
17. M. Mertens and L. Rolén, *On class invariants for non-holomorphic modular functions and a question of Bruinier and Ono*, Res. Number Theory, (2015) 1:4.
18. M. Mertens and L. Rolén, *Lacunary Recurrences for Eisenstein Series*, Res. Number Theory, (2015) 1:9.
19. L. Rolén, *A New Construction of Eisenstein's Completion of the Weierstrass Zeta Function*, Proc. Amer. Math. Soc., **144** (2016) 1453–1456.
20. K. Bringmann, J. Duncan, and L. Rolén, *Maass-Jacobi Poincaré Series and Mathieu Moonshine*, Adv. Math., **281** (2015), 248–278.

21. K. Bringmann and L. Rolén, *Radial Limits of Mock Theta Functions*, Res. Math. Sci., **2** (2015), 2:17.
22. K. Bringmann, L. Rolén, and S. Zwegers, *On the modularity of certain functions from the Gromov-Witten theory of elliptic orbifolds*, Royal Soc. Open Sci **2**: 150310.
23. L. Rolén, *On t -core towers and t -defects of partitions*, Ann. Comb., **21**, No. 1 (2017), 119–130.
24. K. Bringmann, L. Rolén, and S. Zwegers, *On the Fourier coefficients of negative index meromorphic Jacobi forms*, Res. Math. Sci. (2016) 3: 5.
25. M. Krauel, L. Rolén, and M. Woodbury, *On a relation between certain q -hypergeometric series and Maass waveforms*, Proc. Amer. Math. Soc., **145** (2017), 543–557.
26. K. Bringmann, J. Manschot, and L. Rolén, *Identities for generalized Appell functions and the blow-up function*, Lett. Math. Phys., **106**, no. 10 (2016), 1379–1395.
27. K. Ono, L. Rolén, and R. Schneider, *Explorations in the theory of partition zeta functions*, 223–264, Chapter 10 of the book *Exploring the Riemann Zeta Function: 190 years from Riemann’s Birth*, editors: H. Montgomery, A. Nikeghbali, and M. Rassias, Springer 2017.
28. K. Ono, L. Rolén, and F. Sprung, *Zeta-polynomials for modular form periods*, Adv. Math., **306** (2017), 328–343.
29. K. Bringmann, J. Lovejoy, and L. Rolén, *On some special families of q -hypergeometric Maass forms*, Int. Math. Res. Not., Vol. 2018, No. 18, 5537–5561.
30. N. Andersen, K. Bringmann, and L. Rolén, *Images of Maass-Poincaré series in the lower half-plane*, Contributions in Mathematical and Computational Science **10**, Springer 2017, proceedings of *L-functions and automorphic forms*.
31. K. Bringmann, B. Kane, S. Löbrich, K. Ono, and L. Rolén, *Number-theoretic generalization of the Monster denominator formula*, Journal of Physics A: Mathematical and Theoretical **50** (2017) 473001, issue on “New Moonshines”, 14 pages.
32. K. Bringmann, J. Kaszian, and L. Rolén, *Indefinite theta functions arising in Gromov-Witten Theory of elliptic orbifolds*, Cambridge Journal of Mathematics, **6** no. 1 (2018), 25–57.
33. N. Diamantis and L. Rolén, *Period polynomials, derivatives of L -functions, and zeros of polynomials*, Res. Math. Sci., in the collection: Modular Forms are Everywhere: Celebration of Don Zagier’s 65th Birthday, 5 (9) (2018).
34. K. Bringmann, B. Kane, S. Löbrich, K. Ono, and L. Rolén. *On divisors of modular forms*, Adv. Math., **329** (2018), 541–554.
35. N. Benjamin, S. Kachru, K. Ono, and Larry Rolén, *Black holes and class groups*, Research in the Mathematical Sciences, **5** (2018), in the collection: Modular Forms are Everywhere: Celebration of Don Zagier’s 65th Birthday, A43, 22 pages.
36. L. Rolén, *Mordell Integrals*, entry in Encyclopedia of Srinivasa Ramanujan and His Mathematics, editors: Krishnaswami Alladi, George E. Andrews, Bruce C. Berndt and Ken Ono, accepted.
37. M. Griffin, K. Ono, L. Rolén, and D. Zagier, *Jensen polynomials for the Riemann zeta function and other sequences*, Proceedings of the National Academy of Sciences, USA, **116**, no. 23 (2019), 11103–11110.
38. K. Ono and L. Rolén, *On Witten’s extremal partition functions*, Annals of Combinatorics, (special issue for George Andrews’ 80th birthday conference), **23** (2020), 953–961.
39. N. Gillman, X. Gonzalez, K. Ono, L. Rolén, and M. Schoenbauer, *From partitions to Hodge numbers of Hilbert Schemes of Surfaces*, Philosophical Transactions of the Royal Society, Series A, **378** (2020), 2163, special issue: “Srinivasa Ramanujan: in celebration of the centenary of his election as FRS”, 13 pages.

40. L. Rolén and K. Taylor, *Richaud-Degert Real Quadratic Fields and Maass Waveforms*, Annals of Combinatorics (special issue for George Andrews' 80th birthday), Annals of Combinatorics, **23** (2019), 1009–1026.
41. K. Bringmann, B. Kane, S. Löbrich, K. Ono, and L. Rolén, *Corrigendum for “On Divisors of modular forms”*, Advances in Mathematics (2020) **374**: Art. 106751.
42. S. Ehlen, P. Guerzhoy, B. Kane, and L. Rolén, *Central L -values of elliptic curves and local polynomials*, Proc. London Math. Soc. **120** (2020), 742–769.
43. N. Diamantis and L. Rolén, *Eichler cohomology and zeros of polynomials associated to derivatives of L -functions*, Journal für die reine und angewandte Mathematik (Crelle's Journal), **770** (2021), 1–25.
44. P. Guerzhoy, M. Mertens, and L. Rolén, *Periodicities for Taylor coefficients of half-integral weight modular forms*, Pacific Journal of Math., **307** no. 1 (2020), 131–157.
45. L. Rolén and I. Wagner, *A note on Schwartz functions and modular forms*, Archiv der Mathematik, **115** (2020), 35–51.
46. A. Babei, L. Rolén, and I. Wagner, *The Riemann Hypothesis for Period Polynomials of Hilbert modular forms*, Journal of Number Theory, **218** (2021), 44–61.
47. M. Mertens, K. Ono, and L. Rolén, *Mock modular Eisenstein series with Nebentypus*, Int. J. Number Theory (special issue for Bruce Berndt's 80th birthday conference), accepted for publication.

Preprints

48. K. Ono, M. Locus Dawsey, A. Wilson, S. Mesihovic, F. Muir, S. Ono, J. Howell, L. Rolén, *A case study of elite breaststrokers using inertial measurement units*, submitted.
49. M. Griffin, K. Ono, J. Thorner, Z. Tripp, L. Rolén, and I. Wagner, *Jensen polynomials for the Riemann Ξ -function*, submitted, arxiv: 1910.01227.
50. M. Alsharif, M. Gibson, D. de Laat, M. Milinovich, Z. Tripp, L. Rolén, and I. Wagner, *Pair correlation for Dedekind zeta functions*, in preparation.
51. J. Duncan, M. Griffin, M. Mertens, and L. Rolén, *Elliptic curve arithmetic and Janko's first group*, in preparation.
52. K. Bringmann, B. Kane, L. Rolén, and Z. Tripp, *Fractional partitions and conjectures of Chern-Fu-Tang and Heim-Neuhauser*, submitted, arxiv: 2011.08874.
53. L. Rolén, Z. Tripp, and I. Wagner, *Cranks for Ramanujan-type congruences of k -colored partitions*, submitted, arxiv: 2006.16195.
54. J. Males, A. Mono, and L. Rolén, *Polar Harmonic Maass forms and Holomorphic Projection*, submitted, arxiv: 2009.04955.
55. J. Males, A. Mono, and L. Rolén, *Higher depth mock theta functions and q -hypergeometric series*, submitted, arxiv: 2101.04991.
56. L. Rolén and K. Taylor, *TBD*, in preparation.
57. Y. Jiang, L. Rolén, and M. Woodbury, *TBD*, in preparation.

Advising

- Postdocs*
- Ian Wagner (2019-Present).
 - Angelica Babei (2019-2020).
- Graduate Students*
- Zachary Tripp
- Undergraduate Research*
- Supervising undergraduate research thesis for Madelynn Roche.
 - Supervision of undergraduate Honors Thesis for Jackson Knox in AY 2020-2021.
 - Organized and funded the Cologne Young Researchers in Number Theory Program 2015 and advised 9 international students for 6 weeks. This resulted in 3 publications, in the journals Proc. Amer. Math. Soc. and Res. Number Theory.
- Theses*
- Four Master's/Diploma theses and one Bachelor's thesis co-advised with Kathrin Bringmann at the University of Cologne.
 - Served on undergraduate thesis committee for Qianhan Liu, Vanderbilt University, 2019.
 - Vanderbilt Ph.D. defense committees: Ahram Feigenbaum (2019), Jun Yang, Nathaniel Tenpas.
- Emory REU*
- 2013, 2018, and 2019: Teaching and advising in the REU in Number Theory at Emory University organized by Ken Ono.
- Other*
- Co-founder, with Mark Sapir, of the Nashville Math Club. This is a math circle for middle and high schoolers. I ran the operations of the club for several semesters.
 - With Lori Rafter and Madelynn Roche, I am co-organizing the Vanderbilt Regional Math Tournament (VRMT), an upcoming yearly high school math competition to start in Fall 2021.
 - Advised 3 students at the Hamilton Trust Summer Internship Programme 2017 at Trinity College Dublin, which I organized.
 - Advised a visiting Ph.D. student at the Pennsylvania State University for one month.
 - Libby Taylor (undergraduate at Georgia Tech)
 - Joshua Males (Ph.D. student at the University of Cologne)
 - Served as academic advisor for a number of undergraduate math majors at Vanderbilt.
- Teaching**
- **Topics Course on Modular Forms**, Vanderbilt University (Fall 2020).
 - **Graduate Algebra II**, Vanderbilt University (Spring 2020).
 - **Number Theory**, Vanderbilt University (Spring 2020).
 - **Graduate Algebra I**, Vanderbilt University (Fall 2019).
 - **Number Theory**, Vanderbilt University (Spring 2019).
 - **Linear Algebra**, Vanderbilt University (Spring 2019).
 - **Linear Algebra**, Vanderbilt University (Fall 2018).
 - **Topics Course in Modular Forms**, Georgia Tech (Spring 2018).
 - **Intro to Number Theory**, Georgia Tech (Spring 2018).
 - **Graduate Algebra I**, Georgia Tech (Fall 2017).
 - **Foundations of Mathematical Proof**, Georgia Tech (Fall 2017).
 - **Linear Algebra Textbook**, helped write interactive textbook, Georgia Tech (2017-2018).
 - **Advanced Calculus** (equivalent to Calculus III), Trinity College Dublin (Spring 2017).
 - **Linear Algebra I**, Trinity College Dublin (Fall 2016).

- **Discrete Mathematics** (Intro to proofs, number theory, and groups), Pennsylvania State University (Spring 2016).
- **Calculus 1**, Pennsylvania State University (Fall 2015) and Emory University (Spring 2013 and Fall 2012).
- **Elliptic Functions and Related Objects**, University of Cologne (Winter 2014).
- Co-Organizer for Student Seminars at the University of Cologne on the following topics:
 - **Modular Forms** (Spring 2015)
 - **Generating Functions** (Spring 2015)
 - **L -functions** (Spring 2014)
 - **Asymptotic Expansions of Modular Forms** (Summer 2014)
 - **Partitions** (Summer 2014)
 - **Elliptic Curves** (Winter 2013)

Professional Service

- Chair of Algebra prelim. exam committee, Vanderbilt University, Fall 2020, Spring 2021.
- MAA Student Poster Session judge at JMM 2021.
- Co-organizer: Automorphic Forms Workshop (2022)
- Co-organizer: Shanks conference (2022) (title TBA)
- Co-organizer: Shanks workshop on “100 years of mock theta functions: New directions in partitions, modular forms, and mock modular forms”, 2021.
- Co-organizer: AMS special session on “Analytic Theory of Automorphic Forms and L -Functions” at Joint Math Meetings 2020.
- Co-organizer: Number Theory Seminar, Vanderbilt University, 2019-present.
- Member of the Undergraduate Committee, Vanderbilt University 2019-2020.
- Member of Postdoc Search Committee, Vanderbilt University, 2019-2020.
- Member on Algebra preliminary exam committee, Vanderbilt University, Fall 2019.
- Member of Postdoc Search Committee, Vanderbilt University, 2018-2019.
- Member on Graduate Committee, Vanderbilt University, 2018-2019.
- Co-organizer: Geometry Seminar, Vanderbilt University, 2018-2019.
- Co-wrote Algebra comprehensive exam, Georgia Tech, Spring 2018.
- Organizer: “Hamilton Trust Summer Internship Program 2017,” Trinity College Dublin.
- HMI Workshop “Indefinite theta functions and applications in physics and geometry,” Trinity College Dublin, Co-organizer, 2017.
- “Modular forms are everywhere,” School, Max Planck Institute for Mathematics in Bonn, Co-organizer, 2017.
- Modular forms seminar, Trinity College Dublin, Organizer, 2016.
- Cologne Young Researchers in Number Theory Program, Organizer, 2015.
- “Characters of Representations and Modular Forms,” Summer School, Max Planck Institute for Mathematics in Bonn, Co-Organizer, 2015.
- Algebra/Number Theory Seminar, University of Cologne, Co-organizer 2014-15.
- Grant proposal reviewing for several organizations, Mathscinet and Zentralblatt review writing, reviewing for Springer books and Cambridge University Press.
- Refereeing: Acta Arith., Adv. Math., Amer. Math. Monthly, Anal. Appl., Ann. Univ. Ferrara, Ann. Comb., Arch. Math., Asian J. Math., Bull. Lond. Math. Soc., Commun. Number Theory Phys., Compositio Math., Constr. Approx., Discrete Math., Forum Math., Int. J. Number Theory, Int. Math. Res. Not., J. Mathematical Analysis and Applications, J. Number Theory, J. Phys. A, Lett. Math. Phys, Mathematics, Math Research Letters, Proc. Amer. Math. Soc., Publ. Mat., Q. J. Math., Ramanujan J., Res. Math. Sci., Res. Number Theory, Selecta Mathematica, Trans. Amer. Math. Soc., Women In Numbers Proceedings.

Selected**Invited**

- JMM Special Session on Quadratic Forms and Theta Functions, 2021
- AMS Special Session Meeting, (formerly at University of Tennessee at Chattanooga), 2020.

Lectures

- AMS Special Session Meeting, (formerly at The Pennsylvania State University), 2020.
- Amherst REU invited lecture (virtual), 2020.
- International Seminar on Automorphic Forms, Zoom, 2020.
- Number Theory Seminar, University of Mississippi, 2020.
- International Conference on Number Theory, Sastra University, India, 2019.
- Two lectures in the number theory seminar at the Institute of Mathematical Sciences, Chennai, India, 2019.
- Number theory seminar, University of Tennessee, Knoxville, 2019.
- AMS special session on “Experimental Mathematics in Number Theory and Combinatorics”, University of Florida, 2019.
- Seminar at the CUNY Graduate Center, 2019.
- Number theory seminar, UC Davis, 2019.
- Shanks Workshop on Computations and Linear Programming Bounds for Energy, Packing, Vanderbilt University, 2019.
- MAA Invited Paper Session, Joint Math Meetings in Baltimore, 2019.
- Subfactor Seminar, Vanderbilt University, 2018.
- Colloquium and Pure Math Seminar (two talks), University of South Alabama, 2018.
- Athens-Atlanta Number Theory Seminar, 1 of 2 invited speakers, Emory University, 2018.
- Number theory and geometry seminar, University of Nottingham, 2018.
- RTG-Coding theory, cryptography, and number theory seminar, Clemson University, 2018.
- Elementary and analytic number theory, Max Planck Institute for Mathematics, Bonn, Germany, 2018
- 2 talks at the Summer Research Institute on q -Series, Nankai University, China, 2018.
- Emory math circle week of mathematical exploration (expository talk for middle and high schoolers), Atlanta, GA, 2018.
- Conference on Modular Forms and Related Topics, AUB, Lebanon, 2018.
- Number Theory Seminar, Massachusetts Institute of Technology, 2018.
- Colloquium Talk, Louisiana State University, 2018.
- Colloquium Talk, Drexel University, 2018.
- Colloquium Talk, University of Florida, 2018.
- Colloquium Talk, University of Alberta, 2018.
- Colloquium Talk, Carnegie Mellon University, 2017.
- Colloquium Talk, Vanderbilt University, 2017.
- Geometric Methods in Representation Theory Seminar, UNC at Chapel Hill, 2017.
- Algebra and Number Theory Seminar, University of Arizona, 2017.
- Philadelphia Area Number Theory Seminar, Byrn Mawr College, 2017.
- Topology & Group Theory Seminar, Vanderbilt University, 2017.
- Number Theory Seminar, University of Florida, 2017.
- Number Theory Seminar, Emory University, 2017.
- Conference: Number Theory, Geometry, Moonshine & Strings, Simons Foundation, 2017.
- British Mathematics Colloquium, Durham, England, 2017.
- Mathematics Society, Trinity College Dublin, 2017.
- Number Theory Seminar, University College Dublin, 2016.
- Conference School on mock theta functions and related topics, series of 4 lectures, Fukuoka, Japan, 2016.

- Undergraduate math club lecture, The Pennsylvania State University, 2016.
- Number Theory Seminar (two talks, one for students), UIUC, 2015.
- Mass Colloquium Speaker (program for advanced undergraduates), The Pennsylvania State University, 2015.
- Number Theory Seminar, Brigham Young University, 2015.
- Undergraduate talk, Amherst College, 2015.
- Number Theory Seminar, Universität Heidelberg, 2015.
- 13th International Symposium on Orthogonal Polynomials, Special Functions, and Applications, National Institute of Standards and Technology, USA, 2015.
- Automorphic Forms: Advances and Applications, Luminy Institute of Mathematics, France, 2015.
- Geometric Methods in Representation Theory Seminar, UNC at Chapel Hill, 2015.
- UNC-Duke Number Theory Seminar, UNC at Chapel Hill, 2015.
- Algebra and Number Theory Seminar, Emory University, 2015.
- Colloquium, Center for Communications Research–Princeton, 2014.
- Max Planck Institute for Mathematics Number Theory Lunch Seminar, 2014.
- Number Theory Seminar, Technische Universität Darmstadt, 2014.
- Center for Advanced Mathematical Sciences Seminar, AUB, Lebanon, 2014.
- Seminar Aachen-Köln-Lille-Siegen on Automorphic Forms, 1 or 3 invited speakers, University of Cologne, 2014.
- International Conference on Number Theory and Galois Representations, Sastra University, India, 2013.
- Max Planck Institute for Mathematics Number Theory Seminar, 2013.

Selected

- Palmetto Number Theory Seminar XXXII, University of North Carolina at Charlotte, 2019.

**Contributed
Lectures**

- Maths/physics journal club, Trinity College Dublin, 2016.
- Number Theory Seminar, The Pennsylvania State University, 2016.
- The 2016 Gainesville International Number Theory Conference, in honor of Krishna Alladi's 60th birthday, University of Florida.
- Combinatorics/Partitions Seminar, The Pennsylvania State University, 2015.
- Number Theory Seminar, The Pennsylvania State University, 2015.
- Exciting New Faces in Analytic Number Theory, Hausdorff Center for Mathematics, 2014.
- SouthEast Regional Meeting on Numbers, High Point University, 2013.
- Ramanujan 125, University of Florida, 2012.
- Fall Western Sectional Meeting of the AMS, University of Arizona, 2012.
- Palmetto Number Theory Seminar XVIII, Wake Forest University, 2012.
- Building Bridges: First EU-US Conference on Automorphic Forms and Related Topics, Aachen University, 2012.
- SouthEast Regional Meeting on Numbers, Western Carolina University, 2012.
- Symposium, Mock Modular Forms, Mock Theta Functions, and Applications, University of Cologne, 2012.
- Palmetto Number Theory Seminar XVII, Clemson University, 2011.
- Integers Conference, University of West Georgia, 2011.
- Palmetto Number Theory Seminar XVI, Emory University, 2011.
- Joint Mathematics Meeting Poster Session, New Orleans, 2011.
- Young Mathematicians Conference, Ohio State University, 2010.

- Selected**
- Workshop on “Modularity in Quantum Systems”, UC Santa Barbara, Kavli Institute for Theoretical Physics, October 26th-December 18th 2020.
- Professional**
- Palmetto Joint Arithmetic, Modularity, and Analysis Series (PAJAMAS), virtual conference, 2020.
- Activities**
- The First Journal of Number Theory Biennial Conference, Grand Hotel San Michele, Cetraro, Italy, 2019.
 - ICERM workshop on Modularity and 3-manifolds, 2019.
 - MPS Conference on Number Theory, Geometry, Moonshine and Strings III, Simons Foundation, 2019
 - Srinivasa Ramanujan: centenary of his election as FRS, Royal Society, London, UK, 2018.
 - PANTS XXVIII, University of Tennessee, Knoxville, 2017.
 - Joint Math Meetings, Seattle, Washington, 2016.
 - Oberwolfach Conference on Modular Forms (invited participant), 2014.
 - Applications of Automorphic Forms in Number Theory and Combinatorics, Louisiana State University–Baton Rouge, 2014.
 - Automorphic Forms and Arithmetic, Göttingen University, 2014.
 - Mock Modular Forms, Moonshine, and String Theory, Stony Brook University, 2013.
 - Arizona Winter School 2013: Modular Forms and Modular Curves, University of Arizona.