#### PAUL M. JENKINS

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Chair, BYU Mathematics Department, July 2019–present Associate Chair, BYU Mathematics Department, June 2015–June 2019 Professor, Brigham Young University Mathematics Department, September 2019–present Associate Professor, Brigham Young University Mathematics Department, September 2014–August 2019

Assistant Professor, Brigham Young University Mathematics Department, January 2009–August 2014

Hedrick Assistant Professor/NSF Postdoctoral Fellow, UCLA Mathematics Department, July 2006–December 2008

#### 1. Education

- Ph.D. Mathematics, May 2006, University of Wisconsin-Madison. Advisor: Ken Ono
- M.S. Mathematics, August 2002, Brigham Young University. Advisor: David Clark
- B.S. Mathematics with University Honors and Summa Cum Laude, December 2000, Brigham Young University.

#### 2. Publications

- M. Griffin, P. Jenkins, and G. Molnar, *The arithmetic of modular grids*, Mathematika 68 (2022), no. 4, 1080–1119, arXiv:2012.14403v3 [math.NT].
- (2) BYU Computational Number Theory Group, Odd, spoof perfect factorizations, Journal of Number Theory 234 (2022), 31–47, arXiv:2006.10697v1 [math.NT].
- (3) P. Jenkins and R. Keck, Congruences for coefficients of modular functions in levels 3, 5, and 7 with poles at 0, Journal of Number Theory 214 (2020), 13–26, doi:10.1016/j.jnt.2020.04.006, arXiv:2001.04337v2 [math.NT].
- (4) K. Bringmann, P. Jenkins, and B. Kane, Differential operators on polar harmonic Maass forms and elliptic duality, Quarterly Journal of Mathematics 70 (2019), no. 4, 1181–1207, arXiv:1704.08649v1 [math.NT].
- (5) V. Iba, P. Jenkins, and M. Warnick, Divisibility properties of coefficients of modular functions in genus zero levels, Integers 19 (2019), #A7, arXiv:1711.06239v2 [math.NT].
- (6) P. Jenkins and G. Molnar, Zagier duality for level p weakly holomorphic modular forms, The Ramanujan Journal 50 (2019), no. 1, 93–109, doi: 10.1007/s11139-018-0009-8, arXiv:1709.10023v2 [math.NT].
- (7) P. Jenkins, R. Keck, and E. Moss, Congruences for coefficients of level 2 modular functions with poles at 0, Archiv der Mathematik 111 (2018), no. 4, 369–378, doi: 10.1007/s00013-018-1207-8, arXiv:1709.10189v1 [math.NT].
- (8) P. Jenkins and DJ Thornton, Weakly holomorphic modular forms in prime power levels of genus zero, Integers 18 (2018), #A18, arXiv:1703.08145v1 [math.NT].
- (9) N. Green and P. Jenkins, Integral traces of weak Maass forms of genus zero odd prime level, The Ramanujan Journal **42** (2017), no. 2, 453–478, arXiv:1370.2204v1 [math.NT].
- (10) A. Folsom and P. Jenkins, Zeros of modular forms of half integral weight, Research in Number Theory, 2:23 (2016), 1–25, http://link.springer.com/article/10.1007/s40993-016-0054-6.

- (11) P. Jenkins and K. Pratt, Coefficient bounds for level 2 cusp forms and modular functions, Acta Arithmetica 168 (2015), 341–367, arXiv:1408.1083v1 [math.NT].
- (12) P. Jenkins and DJ Thornton, Congruences for coefficients of modular functions, The Ramanujan Journal 38 (2015), no. 3, 619–628, arXiv:1404.0699v1 [math.NT].
- (13) P. Jenkins and K. Pratt, Interlacing of zeros of weakly holomorphic modular forms, Proceedings of the American Mathematical Society, Series B 1 (2014), 63–77, arXiv:1308.1123v1 [math.NT].
- (14) A. Haddock and P. Jenkins, Zeros of weakly holomorphic modular forms of level 4, International Journal of Number Theory 10, no. 2 (2014), 455–470, doi: 10.1142/S1793042113501030, arXiv:1305.3896v1 [math.NT].
- (15) S. Garthwaite and P. Jenkins, Zeros of weakly holomorphic modular forms of levels 2 and 3, Mathematical Research Letters 20, no. 4 (2013), 657–674, arXiv:1205.7050v2 [math.NT].
- (16) N. Andersen and P. Jenkins, Divisibility properties of coefficients of level p modular functions for genus zero primes, Proceedings of the American Mathematical Society 141 (2013), 41– 53, arXiv:1106.1188v1 [math.NT].
- (17) D. Doud, P. Jenkins and J. Lopez, Two-divisibility of the coefficients of certain weakly holomorphic modular forms, The Ramanujan Journal 28 (2012), no. 1, 89–111, doi: 10.1007/s11139-011-9331-0, arXiv:1105.0684v2 [math.NT].
- (18) P. Jenkins and J. Rouse, Bounds for coefficients of cusp forms and extremal lattices, Bulletin of the London Mathematical Society (2011) 43 (5), 927–938, doi: 10.1112/blms/bdr030, arXiv:1012.5991v1 [math.NT].
- (19) D. Doud and P. Jenkins, *p-adic properties of coefficients of weakly holomorphic modular forms*, International Mathematics Research Notices (2010) 2010: 3184–3206; arXiv:0910.2997v1 [math.NT], doi: 10.1093/imrn/rnp240.
- (20) W. Duke and P. Jenkins, Integral traces of singular values of weak Maass forms, Algebra and Number Theory 2 (2008), no. 5, 573–593.
- (21) W. Duke and P. Jenkins, On the zeros and coefficients of certain weakly holomorphic modular forms, Pure and Applied Mathematics Quarterly 4 (2008), no. 4, 1327–1340.
- (22) P. Jenkins and K. Ono, Divisibility criteria for class numbers of imaginary quadratic fields, Acta Arithmetica 125 (2006), no. 3, 285–289.
- (23) P. Jenkins, Traces of singular moduli, modular forms, and Maass forms, Dissertation (Ph.D.), University of Wisconsin-Madison, 2006.
- (24) P. Jenkins, Kloosterman sums and traces of singular moduli, Journal of Number Theory 117 (2006), no. 2, 301–314.
- (25) J. Bruinier, P. Jenkins and K. Ono, *Hilbert class polynomials and traces of singular moduli*, Mathematische Annalen **334** (2006), no. 2, 373–393.
- (26) P. Jenkins, *p-adic properties for traces of singular moduli*, International Journal of Number Theory 1 (2005), no. 1, 103–107.
- (27) P. Jenkins, Odd perfect numbers have a prime factor exceeding 10<sup>7</sup>, Mathematics of Computation 72 (2003), no. 243, 1549–1554.
- (28) P. Jenkins, *Isolated inhomogeneous minima of binary quadratic forms*, Thesis (M.S.), Brigham Young University Department of Mathematics, 2002.
- (29) P. Jenkins, Odd perfect numbers have a prime factor exceeding 10<sup>7</sup>, Honors Thesis, Brigham Young University, 2000.

#### 3. Selected Presentations

• *Modular grids*, International Conference on Number Theory, SASTRA University, India, December 21, 2019

- *The arithmetic of modular grids*, Analytic and Combinatorial Number Theory: The Legacy of Ramanujan, University of Illinois at Urbana-Champaign, June 7, 2019
- The arithmetic of modular grids, Special Session on Recent Advances and Applications of Modular Forms, AMS Spring Western and Central Joint Sectional Meeting, University of Hawaii, March 23, 2019
- Canonical bases for spaces of weakly holomorphic modular forms, Building Bridges: 4th EU/US Workshop on Automorphic Forms and Related Topics, Alfréd Rényi Institute of Mathematics, Budapest, Hungary, July 18, 2018
- *The arithmetic of modular grids*, Conference on Modular Forms and Related Topics, American University of Beirut, May 31, 2018
- Properties of weakly holomorphic modular forms, American University of Beirut, April 18, 2017
- Broken one-time pads and other projects, MAA Session on Cryptology for Undergraduates, Joint Mathematics Meetings, Atlanta, January 4, 2017
- Zeros of modular forms of half integral weight, Special Session on Automorphic Forms, Combinatorics and Representation Theory, AMS Spring Western Sectional Meeting, University of Utah, April 9, 2016
- Zeros of modular forms of half integral weight, 30th Automorphic Forms Workshop, Wake Forest University, March 7, 2016
- Congruences for coefficients of weakly holomorphic modular forms, University of Cologne Number Theory Seminar, April 7, 2015
- Zeros of weakly holomorphic modular forms, Cologne Young Researchers in Number Theory Program 2015, University of Cologne, Germany, March 31, 2015
- Zeros of weakly holomorphic modular forms of half integral weight, 29th Automorphic Forms Workshop, University of Michigan, March 2, 2015
- Singular moduli and modular forms (minicourse with W. Duke), Building Bridges: 2nd EU/US Summer School on Automorphic Forms and Related Topics, University of Bristol, July 2–3, 2014
- Weakly holomorphic modular forms, Yale University SUMRY colloquium, June 12, 2014
- Congruences for coefficients of modular functions, Special Session on Recent Developments in Number Theory, AMS Spring Central Sectional Meeting, Texas Tech University, April 12, 2014
- Integrality properties of Zagier lifts of prime level, 27th Automorphic Forms Workshop, University College Dublin, Ireland, March 11, 2013
- Zeros of weakly holomorphic modular forms of levels 2 and 3, Ramanujan 125, University of Florida, November 5, 2012
- Zeros and coefficients of weakly holomorphic modular forms, Special Session on Harmonic Maass Forms and q-series, AMS Fall Western Sectional Meeting, University of Arizona, October 28, 2012
- Zeros and coefficients of weakly holomorphic modular forms, Texas A&M University Number Theory Seminar, October 17, 2012
- Zeros of weakly holomorphic modular forms of levels 2 and 3, 1st EU-US Conference on Automorphic Forms and Related Topics, RWTH Aachen University, Germany, August 8, 2012
- Zeros of weakly holomorphic modular forms of level 2, 26th Automorphic Forms Workshop, University of British Columbia, April 27, 2012

- Bounds for coefficients of cusp forms and extremal lattices, Special Session on Modular Forms, Elliptic Curves, and Related Topics, AMS Fall Southeastern Section Meeting, Wake Forest University, September 24, 2011
- Cryptography, Bucknell University Mathematics Department Student Colloquium, April 28, 2011
- Weakly holomorphic modular forms, Bucknell University Mathematics Department Distinguished Visiting Professor, April 25, 2011
- Bounds for coefficients of cusp forms and extremal lattices, 25th Automorphic Forms Workshop, Oregon State University, March 26, 2011
- Bounds for coefficients of cusp forms and extremal lattices, Conference on Modular Forms and Mock Modular Forms and their Applications in Arithmetic, Geometry, and Physics, International Centre for Theoretical Physics, Trieste, Italy, March 18, 2011
- Weakly holomorphic modular forms, Wake Forest University, Department of Mathematics Colloquium, October 28, 2010
- Coefficient congruences for weakly holomorphic modular forms of integral weight, Special Session on Automorphic Forms and Number Theory, AMS Fall Western Section Meeting, UCLA, October 9, 2010
- Congruences for coefficients of weakly holomorphic modular forms, University of Illinois at Urbana-Champaign Number Theory Seminar, April 29, 2010
- Congruences for coefficients of weakly holomorphic modular forms, University of Wisconsin-Madison Number Theory Seminar, April 27, 2010
- *p-adic properties of coefficients of weakly holomorphic modular forms*, 24th Automorphic Forms Workshop, University of Hawaii, March 23, 2010
- Coefficient congruences for certain weakly holomorphic modular forms, Mock theta functions and applications in combinatorics, algebraic geometry, and mathematical physics, Max Planck Institute for Mathematics, Bonn, Germany, May 26, 2009
- What is cryptography?, 2009 CURM Conference and MAA Intermountain Section Meeting, Brigham Young University, March 20, 2009
- Coefficients and lifts of modular forms on  $\Gamma_0(3)$ , 23rd Annual Workshop on Automorphic Forms and Related Topics, Bucknell University, March 13, 2009
- On singular values of Maass forms, Special Session on Automorphic and Modular Forms in Number Theory, Joint Mathematics Meetings, Washington DC, January 6, 2009
- Zeros of weakly holomorphic modular forms, Western Number Theory Conference, Colorado State University, December 16, 2008
- Singular values of weak Maass forms, Hawaii workshop on the arithmetic of modular forms, University of Hawaii, May 21, 2008
- Integral traces of singular values of Maass forms, 22nd Annual Workshop on Automorphic Forms and Related Topics, Texas A&M University, March 10, 2008
- Integral traces of singular values of Maass forms, University of Wisconsin-Madison Number Theory Seminar, February 14, 2008
- Integral traces of singular values of Maass forms, University of Illinois at Urbana-Champaign Number Theory Seminar, February 12, 2008
- Traces of singular values of Maass forms, Special Session on Modular Forms and Modularity, Joint Mathematics Meetings, San Diego, California, January 7, 2008
- Coefficients and zeros of certain weakly holomorphic modular forms, Illinois Number Theory Fest, University of Illinois at Urbana-Champaign, May 19, 2007

- Properties of certain weakly holomorphic modular forms, Special Session on Number Theory in the Southwest, AMS Spring Western Section Meeting, University of Arizona, April 21, 2007
- Coefficients and zeros of weakly holomorphic modular forms, Claremont Mathematics Colloquium, Claremont Colleges, April 11, 2007
- Zeros of certain weakly holomorphic modular forms, 21st Annual Workshop on Automorphic Forms and Related Topics, University of California at Santa Barbara, March 27, 2007
- Zeros of weakly holomorphic modular forms, Special Session on Analytic Number Theory and Modular Forms, AMS Fall Southeastern Section Meeting, University of Arkansas, November 4, 2006
- Borcherds products, Zagier duality, and traces of singular moduli, Brigham Young University Mathematics Department Colloquium, February 9, 2006
- Maass-Poincaré series and p-divisibility of traces of singular moduli, Special Session on Arithmetic Geometry and Modular Forms, Joint Mathematics Meetings, San Antonio, Texas, January 13, 2006
- *p-adic properties of traces of singular moduli*, Intersection of Arithmetic Cycles and Automorphic Forms, CRM, Montreal, December 14, 2005
- Maass-Poincaré series and p-divisibility of traces of singular moduli, Texas A&M University Number Theory Seminar, November 30, 2005
- Borcherds products and p-adic properties of singular moduli, Brigham Young University Mathematics Department Colloquium, July 28, 2005
- Borcherds products and p-adic properties of singular moduli, ArithmeTexas, Texas A&M University, April 2, 2005
- Recent work on traces of singular moduli, 19th Annual Workshop on Automorphic Forms and Related Topics, University of North Texas, March 17, 2005
- *Kloosterman sums and traces of singular moduli*, Additive Number Theory Conference, University of Florida, November 20, 2004
- Zagier's generating functions for traces of singular moduli, Arakelov Theory and Modular Forms, NSF FRG Conference, University of Wisconsin-Madison, September 19, 2004
- Asymptotics of traces of singular moduli, Canadian Number Theory Association VIII, University of Toronto, June 22, 2004
- Asymptotics of traces of singular moduli, Illinois Number Theory Conference, University of Illinois at Urbana-Champaign, May 21, 2004
- Asymptotics of traces of singular moduli, 18th Annual Workshop on Automorphic Forms and Related Topics, University of California at Santa Barbara, March 23, 2004

## 4. Local Seminar Talks

- Cryptography, BYU Women in Math, January 17, 2018
- Cryptography, BYU middle school math camp, June 22, 2017
- Cryptography, Bingham High School, May 15, 2017
- An introduction to modular forms for physicists, BYU Theoretical Physics Seminar, March 21, 2017
- Cryptography, Salem Hills High School, December 14, 2015
- Cryptography, Alpine School District/PCMI Summer Math Program, July 9, 2015
- Cryptography (with Darrin Doud), Toyota-BYU Applied Math Initiative, June 9, 2015
- Cryptography, Bingham High School, May 18, 2015
- Cryptography, Bingham High School, May 20, 2014

- Weakly holomorphic modular forms, BYU Topics in Advanced Mathematics Seminar, April 11, 2013
- Cryptography, BYU High School Mathematics Banquet, November 10, 2011
- Bounds for coefficients of cusp forms and extremal lattices, BYU Number Theory Seminar, November 1, 2011
- Undergraduate mathematics research at BYU, BYU Seminar in Mathematics (Math 221), October 27, 2011
- Cryptography, BYU middle school math camp, June 21, 2011
- Cryptography, BYU Seminar in Mathematics (Math 221), September 16, 2010
- Cryptography, BYU REU, July 22, 2010
- Cryptography, BYU High School Mathematics Banquet, November 5, 2009
- *p-adic properties of coefficients of weakly holomorphic modular forms*, BYU Number Theory Seminar, October 13, 2009
- Cryptography, BYU Seminar in Mathematics (Math 221), September 24, 2009
- Cryptography, BYU REU, July 16, 2009
- Weakly holomorphic modular forms, BYU Mathematics Department Colloquium, December 2, 2008
- Integral traces of singular values of weak Maass forms, BYU Number Theory Seminar, October 15, 2008
- Integral traces of singular values of Maass forms, UCLA Number Theory Seminar, March 31, 2008
- Borcherds products, Zagier duality, and traces of singular moduli, UCLA Number Theory Seminar, January 22, 2007
- Borcherds products and p-adic properties of singular moduli, University of Wisconsin-Madison Number Theory Seminar, March 10, 2005
- *Kloosterman sums and traces of singular moduli*, University of Wisconsin-Madison Number Theory Seminar, November 4, 2004
- *Traces of singular moduli*, University of Wisconsin-Madison Number Theory Seminar, December 4, 2003
- Odd perfect numbers have a prime factor exceeding 10<sup>7</sup>, University of Wisconsin-Madison Number Theory Seminar, September 19, 2002
- Odd perfect numbers have a prime factor exceeding 10<sup>7</sup>, Brigham Young University Number Theory Seminar, March 20, 2002
- Odd perfect numbers have a prime factor exceeding 10<sup>7</sup>, Brigham Young University Graduate Student Seminar, October 25, 2001

# 5. Teaching

- Mathematical Cryptography
  - Fall 2015, Fall 2013, Fall 2012, Fall 2010, Fall 2009, BYU (Math 485)
  - Spring 2008, UCLA (Math 116)
- Algorithm Design & Optimization 1
  - Fall 2022, Fall 2021, Fall 2018, Fall 2017, BYU (Math 320)
- Calculus I
  - Winter 2019, Fall 2015, Fall 2011, Fall 2009 (Honors), Spring 2002, Winter 2002, Winter 2001, BYU (Math 112)
- Number Theory
  - Fall 2011, BYU (Math 487)
- Modular Forms

Winter 2020, Spring 2016, Winter 2013, Fall 2010, BYU (Math 682/675R/687R, Modular Forms/Special Topics in Algebra/Analytic Number Theory)

- Algebraic Number Theory
  - Fall 2014, BYU (Math 586)
- Analytic Number Theory
  - Winter 2018, Winter 2014, BYU (Math 587)
- The Mathematics of Secrecy

 August 2018, August 2017, August 2016, August 2014, August 2013, August 2012, August 2011, August 2010, August 2009, with Darrin Doud, BYU (Honrs 100R/101, Late Summer Honors)

• Abstract Algebra 1

Winter 2022, Winter 2021, Fall 2019, Fall 2016, Winter 2016, Winter 2012, Winter 2011, Winter 2009, BYU (Math 371)

- Abstract Algebra 2
  - Fall 2013, BYU (Math 372)
- Fundamentals of Mathematics

 Winter 2023, Fall 2018, Fall 2014, Winter 2014, Winter 2013, Fall 2012, Winter 2012, BYU (Math 290)

- Calculus III
  - Fall 2016, BYU (Math 314)
- Combinatorics
  - Spring 2007, UCLA (Math 113)
- Calculus II
  - Fall 2006, Fall 2007, UCLA (Math 31B)

## 6. Students

# Graduate Students

- Miriam Beazer, MS 2021, winter 2020-summer 2021
- Ryan Keck, MS 2020, fall 2018–spring 2020
  - Presentation (speed talk) at 33rd Automorphic Forms Workshop, Duquesne University, March 8, 2019
  - P. Jenkins and R. Keck, Congruences for coefficients of modular functions in levels 3, 5, and 7 with poles at 0, Journal of Number Theory 214 (2020), 13–26, doi:10.1016/j.jnt.2020.04.006, arXiv:2001.04337v2 [math.NT].
- Hankun Ko, PhD 2019, spring 2016–summer 2019
- Eric Moss, MS 2018, spring 2017–summer 2018
  - P. Jenkins, R. Keck, and E. Moss, Congruences for coefficients of level 2 modular functions with poles at 0, Archiv der Mathematik **111** (2018), no. 4, 369–378, doi: 10.1007/s00013-018-1207-8, arXiv:1709.10189v1 [math.NT]
  - Presentation (speed talk) at Modular Forms are Everywhere conference, Max Planck Institute for Mathematics, Bonn, Germany, May 26, 2017
  - Presentation at 32nd Automorphic Forms Workshop, Tufts University, March 19, 2018
  - Presentation at Building Bridges: 4th EU/US Workshop on Automorphic Forms and Related Topics, Alfréd Rényi Institute of Mathematics, Budapest, Hungary, July 18, 2018
- Grant Molnar, MS 2018, winter 2017–summer 2018 (with Michael Griffin)

- P. Jenkins and G. Molnar, Zagier duality for level p weakly holomorphic modular forms, The Ramanujan Journal 50 (2019), no. 1, 93–109, doi: 10.1007/s11139-018-0009-8, arXiv:1709.10023v2 [math.NT]
- Presentation at 31st Automorphic Forms Workshop, East Tennessee State University, March 7, 2017
- Presentation (speed talk) at Modular Forms are Everywhere conference, Max Planck Institute for Mathematics, Bonn, Germany, May 24, 2017
- Presentation at 32nd Automorphic Forms Workshop, Tufts University, March 21, 2018
- Presentation at Building Bridges: 4th EU/US Workshop on Automorphic Forms and Related Topics, Alfréd Rényi Institute of Mathematics, Budapest, Hungary, July 17, 2018
- 2018 NSF Graduate Research Fellowship Honorable Mention
- Daniel Adams, MS 2017, spring 2016–summer 2017
  - Presentation at 31st Automorphic Forms Workshop, East Tennessee State University, March 8, 2017
  - Thesis: Spaces of weakly holomorphic modular forms of level 52
- Kit Vander Wilt, MS 2017, spring 2016–summer 2017
  - Presentation at 31st Automorphic Forms Workshop, East Tennessee State University, March 8, 2017
  - Thesis: Weakly holomorphic modular forms in level 64
- $\bullet$  DJ Thornton, MS 2016, fall 2014–summer 2016
  - P. Jenkins and DJ Thornton, Weakly holomorphic modular forms in prime power levels of genus zero, Integers 18 (2018), #A18, arXiv:1703.08145v1 [math.NT]
  - Presentation at 2016 Automorphic Forms Workshop, Wake Forest University
- Chris Hettinger, MS 2014, spring 2012–summer 2014
- Nathan Green, MS, fall 2011–summer 2013
  - N. Green and P. Jenkins, Integral traces of weak Maass forms of genus zero odd prime level, The Ramanujan Journal 42 (2017), no. 2, 453–478, arXiv:1370.2204v1 [math.NT]
  - V. Dose, N. Green, M. Griffin, T. Mao, L. Rolen, and J. Willis, Singular moduli for a distinguished non-holomorphic modular function, Proc. Amer. Math. Soc. 143 (2015), 965-972
  - Presentation at Palmetto Number Theory Series XIX, University of South Carolina, December 2012

## Undergraduate Research Students

- Archer Clayton, spring 2022–present
- Miriam Beazer, fall 2018–fall 2019
- Ryan Keck, fall 2015–winter 2018
  - P. Jenkins, R. Keck, and E. Moss, Congruences for coefficients of level 2 modular functions with poles at 0, Archiv der Mathematik **111** (2018), no. 4, 369–378, doi: 10.1007/s00013-018-1207-8, arXiv:1709.10189v1 [math.NT]
  - Presentation at 31st Automorphic Forms Workshop, East Tennessee State University, March 7, 2017
- Merrill Warnick, spring 2016–fall 2017
  - V. Iba, P. Jenkins, and M. Warnick, Divisibility properties of coefficients of modular functions in genus zero levels, Integers 19 (2019), #A7, arXiv:1711.06239v2 [math.NT]
  - Presentation at 31st Automorphic Forms Workshop, East Tennessee State University, March 7, 2017
- Victoria Iba, spring 2016–spring 2017

- V. Iba, P. Jenkins, and M. Warnick, Divisibility properties of coefficients of modular functions in genus zero levels, Integers 19 (2019), #A7, arXiv:1711.06239v2 [math.NT]
- Presentation at 31st Automorphic Forms Workshop, East Tennessee State University, March 7, 2017
- Eric Moss, spring 2016–spring 2017
  - Presentation at 31st Automorphic Forms Workshop, East Tennessee State University, March 7, 2017
- Grant Molnar, fall 2014–fall 2016
- Jackie Kunzelman, fall 2015–fall 2015
- Benjamin Herrera, spring 2013–fall 2014
- Kyle Pratt, spring 2012–summer 2014
  - P. Jenkins and K. Pratt, Interlacing of zeros of weakly holomorphic modular forms, Proceedings of the American Mathematical Society, Series B 1 (2014), 63–77, arXiv:1308.1123v1 [math.NT]
  - P. Jenkins and K. Pratt, Coefficient bounds for level 2 cusp forms and modular functions, Acta Arithmetica 168 (2015), 341–367, arXiv:1408.1083v1 [math.NT]
  - J. Andrade, S. Miller, K. Pratt, and M. Trinh, Special sets of primes in function fields, INTEGERS 14 (2014), #A18, arXiv:1309.5597v1 [math.NT]
  - 2014 BYU ORCA grant
  - 2014 NSF Graduate Research Fellowship
  - Presentations at 2013 Automorphic Forms Workshop, University College Dublin, Ireland; 2013 Maine/Quebec Number Theory Conference, University of Maine
- DJ Thornton, spring 2012–summer 2014
  - P. Jenkins and DJ Thornton, Congruences for coefficients of modular functions, The Ramanujan Journal 38 (2015), no. 3, 619–628, arXiv:1404.0699v1 [math.NT]
  - Presentations at 2013 Automorphic Forms Workshop, University College Dublin, Ireland; 2014 Automorphic Forms Workshop, Moab, UT
- Andrew Haddock, spring 2012–spring 2014
  - A. Haddock and P. Jenkins, Zeros of weakly holomorphic modular forms of level 4, International Journal of Number Theory 10, no. 2 (2014), 455–470, doi: 10.1142/S1793042113501030, arXiv:1305.3896v1 [math.NT].
  - 2014 BYU ORCA grant
  - Presentation at 2013 Automorphic Forms Workshop, University College Dublin, Ireland
    2014 National Health Service Corps scholarship
- Adele Lopez, winter 2010–summer 2012 (with Darrin Doud)
  - D. Doud, P. Jenkins and J. Lopez, Two-divisibility of the coefficients of certain weakly holomorphic modular forms, The Ramanujan Journal 28 (2012), no. 1, 89–111, doi: 10.1007/s11139-011-9331-0, arXiv:1105.0684v2 [math.NT]
  - A. Lopez, Imaginary quadratic fields with 2-class group of type (2, 2<sup>l</sup>), arXiv:1302.3453v1 [math.NT]
  - 2012 NSF Graduate Research Fellowship
  - 2012 BYU ORCA grant
  - Presentations at 2010 Western Number Theory Conference, Utah Valley University;
    2011 Automorphic Forms Workshop, Oregon State University
- Chris Hettinger, winter 2011–winter 2012 (with Darrin Doud)
- Nathan Green, spring 2011–fall 2011
- Mason Victors, fall 2010–summer 2011

 C. Guzman, B. Tuckfield, and M. Victors, Patterns in orders of elliptic curves over finite fields

- Bradford Tuckfield, fall 2010–summer 2011
  - C. Guzman, B. Tuckfield, and M. Victors, Patterns in orders of elliptic curves over finite fields
- Chris Guzman, fall 2010–summer 2011
  - C. Guzman, B. Tuckfield, and M. Victors, Patterns in orders of elliptic curves over finite fields
- Nick Andersen, summer 2010–spring 2011 (with Darrin Doud)
  - N. Andersen and P. Jenkins, Divisibility properties of coefficients of level p modular functions for genus zero primes, Proceedings of the American Mathematical Society 141 (2013), 41–53, arXiv:1106.1188v1 [math.NT].
  - 2011 NSF Graduate Research Fellowship Honorable Mention
  - Presentations at 2010 Western Number Theory Conference, Utah Valley University;
    2011 Automorphic Forms Workshop, Oregon State University
- Michael Griffin, fall 2009–winter 2011 (with Darrin Doud)
  - M. Griffin, Divisibility properties of coefficients of weight 0 weakly holomorphic modular forms, International Journal of Number Theory 7 (2011), no. 4, 933–941
  - 2011 National Physical Science Consortium Fellowship
  - 2011 NSF Graduate Research Fellowship
  - 2011 BYU ORCA grant
  - Presentations at 2010 Automorphic Forms Workshop, University of Hawaii; 2010 Western Number Theory Conference, Utah Valley University; 2011 Automorphic Forms Workshop, Oregon State University
- Jocelyn Peck, winter 2010–winter 2011 (with Darrin Doud)
- Joseph Keller, summer 2009–summer 2010
- Leo Teemant, summer 2009–summer 2010
- Tim Krumwiede, summer 2009–summer 2010
- Kevin Childers, winter 2010 (with Darrin Doud)
- Jooyoun Lee, fall 2009 (with Darrin Doud)

#### 7. Awards

- Co-PI, NSA grant H98230-20-1-0013, Workshop on Automorphic Forms and Related Topics (with Michael Griffin and Darrin Doud), 2020
- Co-PI, NSF grant 2005654, Workshop on Automorphic Forms and Related Topics (with Nickolas Andersen, Darrin Doud, and Michael Griffin), 2020
- Brigham Young University Class of 1949 Young Faculty Award, 2018
- Distinguished Mentoring Award, Brigham Young University Department of Mathematics, 2017
- PI, BYU ORCA Mentoring Environment Grant, Computational Number Theory: Modular Forms, 2017–2018
- Distinguished Teaching Award, Brigham Young University Department of Mathematics, 2016
- PI, NSF grant DMS-1404066, Automorphic Forms Workshop 2014 (with David Cardon and Darrin Doud), Spring 2014, Moab, UT
- Distinguished Citizenship Award, Brigham Young University Department of Mathematics, 2013

- PI, NSA grant H98230-14-1-0113, Automorphic Forms Workshop 2014 (with David Cardon and Darrin Doud), Spring 2014, Moab, UT
- Collaboration Grant for Mathematicians (#281876), Simons Foundation, 2013–2018
- Co-PI, BYU ORCA Mentoring Environment Grant (with David Cardon, Darrin Doud, and Pace Nielsen), BYU Computational Number Theory Research Group, 2013–2014
- Distinguished Mentoring Award, Brigham Young University Department of Mathematics, 2011
- PI, BYU ORCA Mentoring Environment Grant (with David Cardon, Darrin Doud, and Pace Nielsen), BYU Computational Number Theory Research Group, 2011–2012
- Project NExT Fellow, 2009–2010
- Co-PI, NSF grant DMS-0910714, Graduate workshop on zeta functions, *L*-functions and their applications, Summer 2009, Orem, UT
- Robert Sorgenfrey Distinguished Teaching Award, UCLA Mathematics Department, 2008
- National Science Foundation Mathematical Sciences Postdoctoral Research Fellowship, DMS-0603271, 2006–2010
- Excellence in Mathematical Research Award, University of Wisconsin-Madison, 2006 (two awards given in department)
- VIGRE Graduate Fellowship, University of Wisconsin-Madison, 2002–2003, 2004–2005
- Graduate Research Award, April 2001, Brigham Young University Department of Mathematics (two awards given in department)
- National Science Foundation Graduate Research Fellowship, Honorable Mention, 2001
- National Merit Scholarship, 1995–2000

# 8. Professional Service

- Editorial board for The Ramanujan Journal
- Reviewer for Mathematical Reviews
- Referee work:
  - Proceedings of the American Mathematical Society
  - International Mathematics Research Notices
  - International Journal of Number Theory
  - Bulletin of the Korean Mathematical Society
  - Mathematical Research Letters
  - The Ramanujan Journal
  - Journal of Integer Sequences
  - Journal of Number Theory
  - Journal of the Ramanujan Mathematical Society
  - Acta Arithmetica
  - Mathematische Zeitschrift
  - Advances in Mathematics
  - American Mathematical Monthly
  - Mathematika
  - Integers
  - Research in Number Theory
  - Compositio Mathematica
  - Research in the Mathematical Sciences
  - Proceedings of the Japan Academy, Ser. A
  - Annals of Combinatorics
  - Symmetry, Integrability, and Geometry: Methods and Applications

- Provo School District mathematics curriculum adoption committee, 2020
- Member, Utah Governor's Standards Review Committee, Fall 2014

# 9. Conferences Attended

# (Titles of talks not previously referenced are noted.)

- A celebration of analytic number theory, a conference in honor of Andrew Granville, CRM, Montreal, September 5–8, 2022
- Second JNT Biennial Conference, Cetraro, Italy, July 18–22, 2022
- Common fundamental domains (speed talk), 100 Years of Mock Theta Functions: New Directions in Partitions, Modular Forms, and Mock Modular Forms, Vanderbilt University, May 22–23, 2022
- 34th Automorphic Forms Workshop, Brigham Young University (online), March 17–19, 2022
- AMS Department Chairs Workshop, January 14, 2021
- Joint Mathematics Meetings and AMS Department Chairs Workshop, Denver, January 14– 16, 2020
- International Conference on Number Theory, Srinivasa Ramanujan Centre, SASTRA University, India, December 21–22, 2019
- Arithmetic, geometry, and modular forms: a conference in honour of Bill Duke, ETH Zurich, June 17–21, 2019
- Analytic and Combinatorial Number Theory: The Legacy of Ramanujan, University of Illinois at Urbana-Champaign, June 6–9, 2019
- AMS Spring Western and Central Joint Sectional Meeting, University of Hawaii, March 22–24, 2019
- Hawaii Number Theory 2019, University of Hawaii, March 18–21, 2019
- 33rd Automorphic Forms Workshop, Duquesne University, March 7-8, 2019
- Srinivasa Ramanujan: in celebration of the centenary of his election as FRS, The Royal Society, London, October 15–16, 2018
- Nonstandard solutions to elementary problems (speed talk), Building Bridges: 4th EU/US Workshop on Automorphic Forms and Related Topics, Alfréd Rényi Institute of Mathematics, Budapest, Hungary, July 16–20, 2018
- Conference on Modular Forms and Related Topics, American University of Beirut, May 28–31, 2018
- 32nd Automorphic Forms Workshop, Tufts University, March 19–22, 2018
- Modular Forms are Everywhere, Max Planck Institute for Mathematics, Bonn, Germany, May 22–26, 2017
- 31st Automorphic Forms Workshop, East Tennessee State University, March 6–9, 2017
- Joint Mathematics Meetings, Atlanta, January 4–6, 2017
- Conference on Elliptic Curves and Modular Forms and Related Topics, University of Connecticut, August 12–14, 2016
- AMS Spring Western Sectional Meeting, University of Utah, April 9, 2016
- 2016 Gainesville Number Theory Conference (Alladi60), March 17–20, 2016
- 30th Automorphic Forms Workshop, Wake Forest University, March 7–10, 2016
- Lattices and Applications in Number Theory, Oberwolfach, Germany, January 17–23, 2016
- Automorphic Forms—Advances and Applications, CIRM, Marseille, France, May 25–29, 2015
- Characters of Representations and Modular Forms, Max-Planck-Institut für Mathematik, Bonn, Germany, March 23–27, 2015
- 29th Automorphic Forms Workshop, University of Michigan, March 2–5, 2015

- Building Bridges: 2nd EU/US Summer School and Workshop on Automorphic Forms and Related Topics, University of Bristol, July 2–9, 2014
- 28th Automorphic Forms Workshop, Moab, Utah, May 12–16, 2014
- Applications of Automorphic Forms in Number Theory and Combinatorics, Louisiana State University, April 13–15, 2014
- AMS Spring Central Sectional meeting, Texas Tech University, April 12, 2014
- Joint Mathematics Meetings, Baltimore, January 15–17, 2014
- Automorphic Forms and L-functions, TU Darmstadt, Germany, March 17–19, 2013
- 27th Automorphic Forms Workshop, University College Dublin, March 11–14, 2013
- Ramanujan 125, University of Florida, November 5–7, 2012
- AMS Fall Western Sectional meeting, University of Arizona, October 27–28, 2012
- 1st EU-US Conference on Automorphic Forms and Related Topics, RWTH Aachen University, Germany, July 30–August 10, 2012
- 26th Automorphic Forms Workshop, University of British Columbia, April 26–29, 2012
- Joint Mathematics Meetings, Boston, January 4–6, 2012
- AMS Fall Southeastern Section Meeting, Wake Forest University, September 24–25, 2011
- 25th Automorphic Forms Workshop, Oregon State University, March 23–26, 2011
- Conference on Modular Forms and Mock Modular Forms and their Applications in Arithmetic, Geometry, and Physics, International Centre for Theoretical Physics, Trieste, Italy, March 14–18, 2011
- The Number Theory of Partitions, Emory University, January 21–23, 2011
- Western Number Theory Conference, Utah Valley University, December 15–18, 2010
- AMS Fall Western Section Meeting, UCLA, October 9–10, 2010
- MAA Mathfest, Pittsburgh, Pennsylvania, August 4–7, 2010
- Prospects in q-series and modular forms, University College Dublin, Ireland, July 14–16, 2010
- 24th Automorphic Forms Workshop, University of Hawaii, March 22–26, 2010
- $\bullet$  Mock modular forms in combinatorics and arithmetic geometry, AIM, Palo Alto, March 8–12, 2010
- Joint Mathematics Meetings, San Francisco, January 13–16, 2010
- MAA Mathfest, Portland, Oregon, August 5-8, 2009
- 2009 Graduate Workshop on Zeta Functions, L-Functions and their Applications, Utah Valley University, June 1–4, 2009
- Mock theta functions and applications in combinatorics, algebraic geometry, and mathematical physics, Max Planck Institute for Mathematics, Bonn, Germany, May 25–29, 2009
- CURM Conference and MAA Intermountain Section Meeting, Brigham Young University, March 20–21, 2009
- 23rd Annual Workshop on Automorphic Forms and Related Topics, Bucknell University, March 10–13, 2009
- Joint Mathematics Meetings, Washington DC, January 5–8, 2009
- Western Number Theory Conference, Colorado State University, December 15–18, 2008
- Combinatory Analysis 2008: Partitions, q-series, and Applications, Penn State University, December 5–7, 2008
- Southern California Number Theory Day, University of California, Irvine, October 25, 2008
- Canadian Number Theory Association X, University of Waterloo, July 13–18, 2008
- Hawaii workshop on the arithmetic of modular forms, University of Hawaii, May 21–24, 2008
- Recent Developments in Number Theory: Selmer Groups, L-functions, and Galois Deformations, UCLA, March 24–29, 2008

- 22nd Annual Workshop on Automorphic Forms and Related Topics, Texas A&M University, March 8–11, 2008
- Joint Mathematics Meetings, San Diego, California, January 7–8, 2008
- Illinois Number Theory Fest, University of Illinois at Urbana-Champaign, May 16–20, 2007
- Fields Medalists Symposium, UCLA, April 26, 2007
- 21st Annual Workshop on Automorphic Forms and Related Topics, University of California at Santa Barbara, March 24–27, 2007
- SAGE Days 3, IPAM, Los Angeles, February 17–21, 2007
- AMS Fall Southeastern Section Meeting, University of Arkansas, November 3–4, 2006
- Southern California Number Theory Day, University of California, Irvine, October 14, 2006
- Harvey Mudd College Mathematics Conference on Enumerative Combinatorics, October 6–7, 2006
- Joint Mathematics Meetings, San Antonio, Texas, January 12–15, 2006
- Intersection of Arithmetic Cycles and Automorphic Forms, CRM, Montreal, December 12–16, 2005
- Borcherds products and p-adic properties of singular moduli, Midwest Number Theory Conference for Graduate Students III, University of Wisconsin-Madison, November 5–6, 2005
- Midwest Number Theory Day, University of Wisconsin-Madison, November 4, 2005
- Singular Moduli and Equidistribution, NSF FRG Conference, University of Maryland, October 7–9, 2005
- Bretton Woods Workshop on Multiple Dirichlet Series, Bretton Woods, New Hampshire, July 11–14, 2005
- Gauss-Dirichlet Conference, Goettingen, Germany, June 20-24, 2005
- ArithmeTexas, Texas A&M University, April 2–3, 2005
- 19th Annual Workshop on Automorphic Forms and Related Topics, University of North Texas, March 17–20, 2005
- *Kloosterman sums and traces of singular moduli*, Midwest Number Theory Conference for Graduate Students and Recent PhDs II, University of Illinois at Urbana-Champaign, February 5–6, 2005
- Additive Number Theory Conference, University of Florida, November 17–20, 2004
- Arakelov Theory and Modular Forms, NSF FRG Conference, University of Wisconsin-Madison, September 16–19, 2004
- Canadian Number Theory Association VIII, University of Toronto, June 2004
- Illinois Number Theory Conference, University of Illinois at Urbana-Champaign, May 2004
- 18th Annual Workshop on Automorphic Forms and Related Topics, University of California at Santa Barbara, March 2004
- *Traces of singular moduli*, Midwest Number Theory Conference for Graduate Students and Recent PhDs, University of Wisconsin-Madison, October 2003
- Isolated inhomogeneous minima of binary quadratic forms, Brigham Young University Spring Research Conference, March 16, 2002
- Wasatch Topology Conference, Park City, Utah, December 2001
- MSRI Summer Graduate Program on Minimal Surfaces, Berkeley, California, June–July 2001