
Department of Mathematics, Franklin & Marshall College
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 Pronouns: she, her

EDUCATIONAL BACKGROUND

Ph.D., Mathematics, Bryn Mawr College, May 2015
 Dissertation: The Nonexistence of Solutions to Certain Families of
 Diophantine Equations
 Advisor: Helen G. Grundman

M.A., Mathematics, Wake Forest University May 2005
 Thesis: Explicit Bounds for Linear Difference Equations
 Advisor: Kenneth S. Berenhaut

B.S., Mathematics, James Madison University, May 2003
 Concentration: Pure Mathematics

RESEARCH INTERESTS

Algebraic Number Theory, Diophantine Equations, Thue equations, Linear Recurrences

EMPLOYMENT

Visiting Assistant Professor, Franklin & Marshall College, Jul. 2021-Present
 Visiting Assistant Professor, Williams College, Jul. 2019-Jul. 2021
 Visiting Assistant Professor, Lebanon Valley College, Aug. 2016-Jul. 2019
 Visiting Assistant Professor, Smith College, Aug. 2015-Jul. 2016
 Instructor, Pennsylvania State University Abington, May 2015-Jul. 2015

GRANTS & RESEARCH AWARDS

Researcher, American Institute of Mathematics (AIM) SQuaREs for *Towers of Codes, Lattices, and VOAs*, San Jose, CA, Oct. 2022

Researcher, A Room of One's Own (AROO), Duke University, NC, Feb. 2020

Researcher, African Institute for Mathematical Sciences (AIMS) - Senegal, Mbour, Jan. 2020

Towards Inclusion, Diversity, and Equity (TIDE) Grant for *Women for Social Development in Mathematics in Africa and Beyond*, Williams College, Jul. 2019 (Event canceled-COVID)

Research in Pairs, Centre International de Rencontres Mathématique (CIRM), Luminy, France, Jul. 2018

Faculty Research Grant for *International Collaboration in Number Theory*, Lebanon Valley College, Apr. 2018

President's Fund for Inclusive Excellence for *Decolonizing Academic Spaces: Women of Color Speaking on Student Success, Allyship and Motherhood*, Panel Viewing & Discussion, Lebanon Valley College, Sept. 2017

National Science Foundation Conference Grant (DMS-1646760) - West Coast Number Theory

Conference (three years),
 Co-PI with Kevin McGown, California State University, Chico,
 & Amanda Tucker, University of Rochester, Nov. 2016
 Faculty Grant for Teaching & Research, Smith College, Nov. 2015

 FUNDED RESEARCH

RNT: Rethinking Number Theory 2, *Monstrous Moonshine*, Virtual, Jun. 2021
 Workshop for Illustrating Algebra and Number Theory, Institute for Computational and
 Experimental Research in Mathematics (ICERM), Providence, RI, Oct. 2019
 Sage Days 103: Women in Sage, Crypto Group, St. Lois, MO, Aug. 2019
 Super Québec–Vermont Number Theory Seminar (QVNTS): Kummer Classes and
 Anabelian Geometry, University of Vermont, VT, Sept. 2016
 Re:Boot Number Theory; Intensive Research Retreat for Women in Number Theory,
 Duke University, NC, Mar. 2016
 Banff International Research Station, Summer School on Contemporary Methods for
 Solving Diophantine Equations, Banff, AB, Canada, Jun. 2012
 Park City Mathematics Institute, Graduate Summer School: Arithmetic of L-functions,
 Park City, UT, Jun. 2009

 PUBLICATIONS

Research

15. “Families of Thue equations over imaginary quadratic number fields,” with B. Earp-Lynch, B. Faye, I. Vukusic, and D. Wisniewski, *in-preparation*.
14. “A tree approach to the happy function,” with Y. Gurtas and P. Harris, *in-preparation*.
13. “On the Diophantine equations of the form $\lambda_1 U_{n_1} + \lambda_2 U_{n_2} + \dots + \lambda_k U_{n_k} = wp_1^{z_1} p_2^{z_2} \dots p_s^{z_s}$,” with B. Ha, L. McBeath, and L. Velasco, *in-preparation*.
12. “Solving Quadratic and Cubic Diophantine Equations using 2-adic Valuation Trees,” with M. Brucal-Hallare, R.M. Riley, V. Sharma, and B. Thompson, *submitted*.
11. “Prime Rational Functions Over a Field,” with O. Kihel, and J. Larone, *submitted*.
10. “Sequences of consecutive factoradic happy numbers,” with J. Carson and P. Harris, *Rocky Mountain J. of Math.* **50** (2020) no. 4, 1241–1252.
9. “Cryptography - Sage Interactions,” with S. Arpin, C. Camacho-Navarro, H.P. Chaos, A. Feaver, S. Lapan, R.L. Miller, A. Newton, and N. Sahajpal (2019).
8. “On the Diophantine equation $X^{2N} + 2^{2\alpha} 5^{2\beta} p^{2\gamma} = Z^5$,” with H. G. Grundman, *Period. Math. Hung.* **75**, (2017) no. 2, 196–200.
7. “The nonexistence of solutions to certain families of Diophantine equations,” Ph.D. dissertation, Bryn Mawr College: ProQuest/UMI, 2015.
6. “Diophantine approximation and the equation $(a^2 cx^k - 1)(b^2 cy^k - 1) = (abcz^k - 1)^2$,” with H. G. Grundman, *J. Number Theory*, **154** (2015), 74–81.
5. “On the Diophantine equation $NX^2 + 2^L 3^M = Y^N$,” with H. G. Grundman, *J. Number Theory* **141** (2014), 214–224.
4. “Explicit bounds for third-order difference equations,” with K. Berenhaut and S. Stević, *ANZIAM J.* **47** (2006), no. 3, 359–366.

3. “Second-order linear recurrences with restricted coefficients and the constant $(1/3)^{1/3}$,” with K. Berenhaut, *Math. Inequal. Appl.* **9** (2006), no. 3, 445–452.
2. “Explicit bounds for second-order difference equations and a solution to a question of Stević,” with K. Berenhaut, *J. Math. Anal. Appl.* **305** (2005), no. 1, 1–10.

Educational

1. “Advice for giving a good virtual talk,” with L. Colmenarejo, M. Gutiérrez González, P. Gya, and P. Harris, *MAA Focus*, December 2020/January 2021, 14–16.

TEACHING AWARDS & RESEARCH FELLOWSHIPS

Mildred & Carl Otto von Kienbusch Graduate Fellowship, Bryn Mawr College, 2014–2015
 Doris Sill Carland Award for Excellence in Teaching, Bryn Mawr College, Apr. 2012
 Doris Sill Carland Prize for Excellence in Teaching, Bryn Mawr College, 2009–2010
 Mary Patterson McPherson Award for Excellence, Bryn Mawr College, Apr. 2009
 Pi Mu Epsilon, North Carolina Lambda Chapter, Wake Forest University, Apr. 2005
 Research Assistantship, Wake Forest University, Jan. – May 2004

TEACHING EXPERIENCE & ACTIVE LEARNING FACILITATOR

Franklin & Marshall College:

Cryptography, **Upcoming** Spring 2023
Calculus I, Fall 2021-Spring 2022 & **Upcoming** Spring 2023
Calculus II, (2 sections) Fall 2022
Preparation for College Mathematics, Fall 2021 & Fall 2022
Linear Algebra & Differential Equations, (2 sections) Spring 2022

Williams College:

Methods for Solving Diophantine Equations (Research Tutorial), Spring 2021
Number Theory, Spring 2021
Cryptography, Spring 2020
Calculus I, Spring 2020
Linear Algebra (2 sections), Fall 2019

Lebanon Valley College:

Abstract Algebra, Spring 2019
Calculus I (2 sections), Fall 2016, Spring 2018, Spring 2019
Cryptography, Fall 2017
Elementary Statistics (2 sections), Fall 2017–Spring 2019
 Hybrid Online, Summer 2017
Linear Algebra, Fall 2016, Fall 2017, Fall 2018
Pre-Calculus, Fall 2018

Smith College:

Calculus I, Spring 2016

Calculus II, Spring 2016

Calculus I, (3 sections), Fall 2015

Topics in Advanced Mathematics: Diophantine Equations, Spring 2016

Pennsylvania State University Abington:

Calculus II (3 sections), Summer 2015

Bryn Mawr College, Guest Lecturer:

Algebraic Number Theory, Apr. 2008

Abstract Algebra I, Nov. 2008, Sept. 2013, Nov. 2014

Abstract Algebra II, Apr. 2009

Bryn Mawr College, Teaching Assistant

Abstract Algebra II, Spring 2009 & Spring 2011

Algebraic Number Theory, Spring 2008

Abstract Algebra I, Fall 2006 & Fall 2008

Real Analysis I, Fall 2007

Elementary Number Theory, Spring 2007

Transitions to Higher Mathematics, Spring 2006

Multivariable Calculus, Fall 2005

Wake Forest University, Teaching Assistant, Fall 2003–Fall 2004

James Madison University, Science and Math Learning Center Tutor, Fall 2001

EDUCATIONAL CERTIFICATION & TRAINING

Dean's Certificate in Pedagogy, Bryn Mawr College, Spring 2006

Educational Training

Lebanon Valley College, Center for Excellence in Teaching and Learning,

Junior Faculty Learning Community, Fall 2016, Fall 2017

Smith College, Sherrerd Center Workshops for New Faculty, 2015-2016

Bryn Mawr College, Perspectives in Math Pedagogy, Fall 2005

STUDENT RESEARCH SUPERVISED

- Graduate Research Faculty Supervisor, Austrian Marshall Plan Foundation, Franklin & Marshall College, Fall 2022-present
 - Ingrid Vukusic (Anticipated Ph.D. May '23)
 - On sums of linear recurrence sequences that are perfect powers*

- Research Faculty Supervisor, Senior Honors Thesis, Franklin & Marshall College, Fall 2022-present
 - Gregory Heilbrunn (Class of ‘23)
Factorization in the semigroup $\mathcal{M}_2(\mathbb{N}_0)^$, the semigroup of 2×2 non-negative integer-valued matrices*
- Research Faculty Adviser, Independent Study, Franklin & Marshall College, Spring 2021
 - Lissangel Martinez (Class of ‘24)
Happy Numbers: Different bases and exponents, different densities
- Diplomaths Research Seminar Supervisor, Franklin & Marshall College, Spring 2021
 - Mark Brugger (Class of ‘24), Brie Friedman (Class of ‘25), Nam Vu (Class of ‘25)
Happy Numbers: Different bases and exponents, different densities
- Research Faculty Adviser with Nicholas Scoville, Independent Research, Ursinus College, Fall 2021
 - Elisa Rodriguez (Class of ‘21)
On the Diophantine equation $ax^2 - p^m = \pm y^n$: The Odd Case
- Research Faculty Supervisor, SMALL REU, Williams College, Summer 2021
 - Fernando Arreola-Garcia (Univ. Arkansas, Class of ‘21), Brian Crane (Williams College, Class of ‘21), Elisa Rodriguez (Ursinus College, Class of ‘21)
On the Diophantine equation $ax^2 - p^m = \pm y^n$: The Even Case
 - Brian Ha (Williams College, Class of ‘21), Lily McBeath (Univ. Cal. Irvine, Class of ‘21), Luisa Velasco (Univ. Dallas, Class of ‘21)
On the Diophantine equations of the form $\lambda_1 U_{n_1} + \lambda_2 U_{n_2} + \dots + \lambda_k U_{n_k} = wp_1^{z_1} p_2^{z_2} \dots p_s^{z_s}$
- Research Faculty Supervisor, Williams College, Spring 2021
 - Heidi Leeds (Class of ‘22), Kasey Stern (Class of ‘21)
Computational Neuroscience in Mathematics
- Senior Colloquium Adviser, Williams College, Spring 2020–Spring 2021
 - Christopher Thomas (Class of ‘21),
Stay Safe in Every Way; Let’s Play Poker 6,000 Miles Apart
2021 Goldberg Award Winner given for the best senior colloquium
 - Rodrigo Bravo (Class of ‘21),
The Mathematics of Bitcoin
 - Hashim Khan (Class of ‘21),
Mathematics of Card Tricks
 - Isabelle (Belle) Furman (Class of ‘20),
Hyperbolic Geometry and Crochet,
2020 Goldberg Award Winner given for the best senior colloquium
- Research Faculty Supervisor, Independent Research Study, Williams College, Fall 2020
 - Saisha Goboodun (Class of ‘21),
Privileged parking functions

- Research Faculty Adviser with Margaret Robinson, Independent Study, Mt. Holyoke College, Fall 2020
 - Jingyi Wu (Class of ‘22)
Connections between k -Naples and privileged parking functions
- Research Faculty Supervisor, Advancing Inquiry and Inclusion in Mathematics Undergraduate Program (AIM UP), Jul. 2020
 - Researchers Supervised: Sasha Ruth Sepulveda (Univ. of Arizona, Class of ‘21), Saisha Goboodun (Williams, Class of ‘21), Jingyi Wu (Mt. Holyoke, Class of ‘22),
Privileged parking functions and its connections to k -Naples and k -zone parking functions
- Doctoral Thesis Committee Member, Université Laval, Québec, Canada, Jun. 2020
 - Jesse Larone (Class of ‘20),
Advisers: Omar Kihel, Brock University & Claude Levesque, Université Laval,
Résolution de certaines équations diophantiennes et propriétés de certains polynômes
- Master’s Thesis Committee Member, African Institute for Mathematical Sciences (AIMS)-Mbour, Senegal, Senegal, May 2020
 - Richard Phiri (Class of ‘20),
Advisers: Frank Neumann, University of Leicester & Franck Kalala Mutombo, AIMS
Diophantine triples and generalized Fibonacci sequences
- Summer Research Supervisor, Williams College, Jun. – Aug. 2020
 - Veronica (Vero) Berger (Class of ‘22), Saisha Goboodun (Class of ‘21)
A brief history of Diophantine equations and current open problems
- Spring Research Supervisor, Williams College, Feb. – May 2020
 - Michael Arena (Class of ‘23),
Some computations required for solving Thue equations over imaginary quadratic fields
 - Veronica (Vero) Berger (Class of ‘22),
A brief history of Diophantine equations and current open problems
 - Jason Meintjes (Class of ‘22),
Understanding continued fractions in non-Euclidean imaginary quadratic fields
- Topics in Advanced Mathematics, Smith College, Jan. – May 2016
 - Researchers Supervised: Catrice Chong (Post-Bacc. Class of ‘16), Elizabeth McGrady (Class of ‘16), GaYee Park (Post-Bacc. Class of ‘16),
Further Studies on the Diophantine Equation $(a^2cX^k - 1)(b^2cY^k - 1) = (abcZ^k - 1)^2$ for $k = 6$

 OUTREACH TO PROMOTE & SUPPORT WOMEN IN MATHEMATICS

Committee Member,

Association for Women in Mathematics (AWM) Membership Committee,
Feb. 2018–Dec. 2021

Discussion Facilitator on “Issues Facing Women in the Mathematical Sciences”,

Mathematical Association of America Northeastern Section Lunch Table,
with Jenn Berg, Nov. 2019

Mathematical Association of America EPaDel Section Lunch Table,
with Rachel Levy, Mar. 2019

with Kristin Lauter, Nov. 2018

Event Coordinator & Discussion Facilitator,

Symposium on Inclusive Excellence Educational Session I: “Decolonizing Academic
Spaces: What This Means for Women of Color in Academia”, Lebanon Valley
College, Jan. 2018

Discussion Facilitator on “Decolonizing Academic Spaces: Women of Color Speaking on
Student Success, Allyship, and Motherhood”, Lebanon Valley College, Sept. 2017

Graduate School Panel Organizer, Women in Mathematics in New England (WiMiN)
Conference, Smith College, Sept. 2015

Conference Session Chair, WiMiN Conference, Sept. 2015

Association for Women in Science (AWIS) Blue Ridge Chapter,

President, 2002–2003

Treasurer, 2001–2002

 OUTREACH TO INCREASE MATH ACCESSIBILITY TO GIRLS & YOUNG STUDENTS

Girl Scouts STEM Expo, AWM Outreach Organizer & Facilitator, Jan. 2018–Jan. 2020

Bucknell University, Oct. 2019

Millersville University, May 2018

East Stroudsburg University, Mar. 2018

Mathematical Discovery Group Leader, STEM Options: Career Pathways for Girls,
Pennsylvania State University Brandywine, PA, May 2019

DaVinci Science Center, Women in Science & Engineering Initiatives (WISE)Presenter,
Career Connection Days, Cedar Crest, PA, Mar. 2019

MathILy Summer Program, Bryn Mawr College, PA

“Continuing Fractions with Continued Fractions”, Jul. 2016 & Jul. 2017

CATALYST, “Patterns in Pascal’s Triangle”, Swarthmore College, PA, Mar. 2013

PROFESSIONAL SERVICE

Research Conference Organizer:

West Coast Number Theory Conference Organizer, Sept. 2015–Present
 American Mathematical Society Special Session Organizer: An Amicable
 Combination of Algebra and Number Theory (Dedicated to Dr. Helen G.
 Grundman), Jan. 2017

Williams College:

Association for Women in Mathematics (AWM) Student Chapter Facilitator, 2019-2020
 Teaching Assistant Evaluation Coordinator, Spring 2020

Lebanon Valley College:

Advising Students, Spring 2016-Spring 2019
 Mathematics Faculty for Discovery Days, Fall 2016-Spring 2019
 Mathematics Faculty for Day at the Valley, Fall 2016-Spring 2019

Smith College:

Teaching Assistant Coordinator, Spring 2016
 Mathematics & Statistics Department Meetings Secretary, Spring 2016
 Post-baccalaureate Program Promoter, Graduate School Fair, JMM, Jan. 2016

Bryn Mawr College:

Student Director, Graduate Group in Science and Mathematics, 2008–2009
 Student Representative, Graduate Council of Arts & Sciences, 2008–2009
 Graduate Student Research Symposium Coordinator, 2007–2009
 Graduate Student Representative, College Budget Committee, 2007–2009
 Mathematics Department Representative, Graduate Student Association, 2007–2009

INVITED PRESENTATIONS FOR UNDERGRADUATES

A Sneak Peak into the World of Diophantine Equations

Franklin & Marshall College, F&M/MU Colloquium Series, Sept. 2021

Welcome to the World of Diophantine Equations

Williams College, SMALL REU Speaker Series, Jun. 2021

Solving Classical Problems in Number Theory Using Modern Techniques

Williams College, SMALL REU Speaker Series, Jul. 2019

An Application of Baker’s Method to Solving a Family of Diophantine Equations

- Lehigh University, Feb. 2019
Pat-A-Cake, Pat-A-Cake Baker's Man, Bake Me a Logarithm as Fast as You Can
 Muhlenberg College, Feb. 2019
 Gettysburg College, Colloquium Speaker Series, Oct. 2018
 Mount St. Mary's University, 2018 Speaker of the AWM Lecture Series, Mar. 2018
 Dickinson College, Math/CS Chat, Feb. 2018
Minding My p's and q's: Using Continued Fractions to Solve a Diophantine Equation
 Alvernia University, Feb. 2019
 Albright College, Oct. 2016
 Lebanon Valley College, Mar. 2016
 Bridgewater College, Mar. 2016
 Ursinus College, Mar. 2016
 Pi Day Talk, DeSales University, Mar. 2016
 Math Lunch Talk, Smith College, Nov. 2015
 James Madison University, Feb. 2015
- Bryn Mawr College, Distressing Math Collective,
News Flash: No Solutions to Diophantine Equations!, Mar. 2012
A Little Fun with Numbers and a Couple of Fun Math Tricks, Jan. 2010
The Hyperbolic Distance on the Upper Half Plane, Nov. 2009
Showing that the Square-Root of 2 is Irrational Again and Again, Jan. 2009
Elliptic Curves, Apr. 2008
A Special Case of Fermat's Last Theorem, Feb. 2008
Positively Algebraic Numbers and their Nonnegative Conjugates, Nov. 2007
The Perfect Numbers, Oct. 2006
Second-Order Linear Recurrences with Restricted Coefficients and the Constant $(1/3)^{1/3}$, Apr. 2006
- James Madison University, Shenandoah Undergraduate Mathematics and Statistics
 (SUMS) Conference, *Graduate School and Industry Careers Panel*,
 Nov. 2005

 CONFERENCE AND SEMINAR PRESENTATIONS

- Joint Mathematics Meeting, AMS Special Session Rethinking Number Theory *Connections between Codes, Lattices, and Vertex Operator Algebras*, Boston, MA **Upcoming** Jan. 2023.

- International Conference in Algebra, Number Theory, and Their Applications, *Linear Recurrences and Powers of Primes*, Faculty of sciences, Dhar El Mahraz - Fez, Morocco, **Upcoming** Oct. 2022.
- Leuca 2022, *A Family of Thue Equations over Imaginary Quadratic Fields II*, Marina di San Gregorio, Patù (Lecce), Italy, May 2022.
- West Coast Number Theory (WCNT), Virtual, *Community Session: Having a Life*, Dec. 2021
- Massachusetts Project Kaleidoscope (PKAL) Network Winter Meeting, Virtual, *Providing Resources for New Faculty in COVID Times and Beyond*, Jan. 2021
- EPaDel Section of Mathematical Association of America Meeting (MAA), Virtual, *Of Card Tricks and Happy Numbers*, Nov. 2020
- Williams Science Lunch, Williams College, Williamstown, MA, *A Few Ideas to Solving Diophantine Equations*, Feb. 2020
- AIMS Colloquium, Mbour, Senegal, *Using Continued Fractions to Solve Diophantine Equations*, Jan. 2020
- West Coast Number Theory Conference (WCNT), Asilomar, CA, *Factoradic Happy Numbers*, Dec. 2019
- Williams Faculty Seminar, Williams College, Williamstown, MA, *Progress in Solving a Family of Thue Equations Over Imaginary Quadratic Fields*, Oct. 2019
- Friendly Workshop on Diophantine Equations and Related Problems (FWDERP), Bursa Uludağ University, Turkey, *A Family of Thue Equations Over Imaginary Quadratic Fields*, Jul. 2019
- Journées Arithmétiques, Istanbul University, Turkey, *Solving a Family of Diophantine Equations Using the Modular Approach*, Jul. 2019
- Mid-Atlantic Seminar on Numbers (MASON), James Madison University, VA, *An Application of Continued Fractions to Solving Diophantine Equations*, Feb. 2019
- Joint Mathematics Meetings (JMM), Baltimore, MD, *Using Continued Fractions to Solve a Family of Diophantine Equations*, Jan. 2019
- EPaDel Section of Mathematical Association of America Meeting (MAA), West Chester, PA, *Using Continued Fractions to Solve Diophantine Equations*, Nov. 2018
- Philadelphia Area Number Theory Seminar, Bryn Mawr College, PA, *Using the Hypergeometric Method to Solve Families of Thue Equations*, Aug. 2018
- Mid-Atlantic Seminar on Numbers (MASON), Towson University, MD, *Solving Some Diophantine Equations with Linear Forms in Logarithms*, Apr. 2018
- Joint Mathematics Meetings (JMM), San Diego, CA, *Solving the Diophantine Equation $(a^2cx^k - 1)(b^2cy^k - 1) = (abcz^k - 1)^2$* , Jan. 2018
- Joint Mathematics Meetings (JMM), San Diego, CA, *Secret Mission Assignment: Teaching Number Theory Through Cryptography*, Jan. 2018
- West Coast Number Theory Conference (WCNT), Pacific Grove, CA, *A Few Words on Some Things*, Dec. 2017

- EPaDel Section of Mathematical Association of America Meeting (MAA), Shippensburg, PA, *Using Linear Forms in Logarithms to Solve Diophantine Equations*, Nov. 2017
- Philadelphia Area Number Theory Seminar, Bryn Mawr College, PA, *Ziegler's Family of Thue Equations over Imaginary Quadratic Fields*, Oct. 2017
- Lebanon Valley College Faculty Forum, Annville, PA, *A Few Ideas to Solving Diophantine Equations*, Nov. 2016
- Mid-Atlantic Seminar on Numbers (MASON), Towson University, MD, *On the Family of Diophantine Equations of the Form $X^{2N} + 2^{2\alpha}5^{2\beta}p^{2\gamma} = Z^5$* , Oct. 2016
- Sixth Annual Upstate New York Number Theory Conference, University of Rochester, NY, *On the Family of Diophantine Equations $(a^2cx^k - 1)(b^2cy^k - 1) = (abcz^k - 1)^2$* , Apr. 2016
- Computational Aspects of Diophantine Equations Conference, University of Salzburg, Austria, *On the Diophantine Equation $(a^2cX^k - 1)(b^2cY^k - 1) = (abcZ^k - 1)^2$* , Feb. 2016
- West Coast Number Theory Conference (WCNT), Pacific Grove, CA, *Adventures in Solving Certain Families of Diophantine Equations*, Dec. 2015
- West Coast Number Theory Conference (WCNT), Pacific Grove, CA, *An Unfinished Problem*, Dec. 2015
- Five College Number Theory Seminar, Amherst College, MA, *Solving the Family of Diophantine Equations $(a^2cX^k - 1)(b^2cY^k - 1) = (abcZ^k - 1)^2$ Using Diophantine Approximations*, Oct. 2015
- Sigma Xi Luncheon Series, Smith College, MA, *Using Linear Forms in Logarithms to Solve Diophantine Equations*, Oct. 2015
- Joint Mathematics Meetings (JMM), San Antonio, TX, *On Solving the Equation $(a^2cX^k - 1)(b^2cY^k - 1) = (abcZ^k - 1)^2$* , Jan. 2015
- Joint Mathematics Meetings (JMM), San Antonio, TX, *Diophantine Equations of the Form $X^{2N} + 2^{2\alpha}5^{2\beta}p^{2\gamma} = Z^5$* , Jan. 2015
- West Coast Number Theory Conference (WCNT), Pacific Grove, CA, *Something New in Diophantine Equations*, Dec. 2014
- 1105th Meeting of the American Mathematical Society (AMS), Greensboro, NC, *New Results in Diophantine Equations*, Oct. 2014
- Philadelphia Area Number Theory Seminar, Bryn Mawr College, PA, *Diophantine Equations II: New Results via Diophantine Approximation*, Oct. 2014
- Philadelphia Area Number Theory Seminar, Bryn Mawr College, PA, *Diophantine Equations I: New Results via the Modular Approach*, Oct. 2014
- West Coast Number Theory Conference (WCNT), Asilomar Conference Center, CA, *On the Diophantine Equation $x^{2n} + 2^{2\ell}p^{2m} = z^5$* , Dec. 2013
- 1093rd Meeting of the American Mathematical Society (AMS), Philadelphia, PA, *The Complete Solution of $NX^2 + 2^L3^M = Y^N$* , Oct. 2013

- Joint Mathematics Meetings (JMM), San Diego, CA, *Solving the Diophantine Equation $NX^2 + 2^L 3^M = Y^N$* , Jan. 2013
- West Coast Number Theory Conference (WCNT), Asilomar Conference Center, CA, *The Odd Cases of $NX^2 + 2^L 3^M = Y^N$* , Dec. 2012
- Temple Number Theory Seminar, Temple University, PA, *On the Diophantine Equation $nx^2 + 2^m 3^{m'} = y^n$* , Mar. 2012
- West Coast Number Theory Conference (WCNT), Asilomar Conference Center, CA, *On the Diophantine Equation $nx^2 + 2^{2m} 3^{2m'} = y^n$* , Dec. 2011
- Temple/Bryn Mawr Number Theory Seminar, Bryn Mawr College, PA, *Elliptic curves over rings*, Jul. 2008
- Temple/Bryn Mawr Number Theory Seminar, Bryn Mawr College, PA, *Explicit Bounds for Second-Order Linear Recurrences with Non-Constant Coefficients*, Jul. 2007
- Twelfth International Conference on Fibonacci Numbers and Their Applications, San Francisco, CA, *Second-Order Linear Recurrences with Restricted Coefficients and the Constant $(1/3)^{1/3}$* , Jul. 2006
- SouthEast Regional Meeting On Numbers (SERMON), University of South Carolina, SC, *Explicit Bounds for Some Linear Recurrences*, Apr. 2005
- Fifth Annual Graduate Student Research Day, Wake Forest University, NC, *Explicit Bounds for Linear Difference Equations*, Mar. 2005
- Joint Mathematics Meetings (JMM), Atlanta, GA, *Explicit Bounds for Second-Order Difference Equations*, Jan. 2005

ADDITIONAL CONFERENCES PARTICIPATION

Joint Mathematics Meetings, Virtual, Jan. 2021

Online Undergraduate Resource Fair for the Advancement in Academia of Marginalized Mathematicians (OURFA²M²), Virtual, Dec. 2020

Advocating for Students of Color: There's More You Can Do, Virtual AMS Webinar, Dec. 2020

Conference on Diophantine m -tuples and related problems II, Purdue University Northwest, Westville/Hammond, IN, Oct. 2018

Hudson River Undergraduate Mathematics Conference (HRUMC), St. Michael's College, VT, Apr. 2016

Joint Mathematics Meetings, Seattle, WA, Jan. 2016

Maine-Québec Number Theory Conference, University of Maine, Oct. 2015

Joint Mathematics Meetings, San Francisco, CA, Jan. 2010

Joint Mathematics Meetings, Washington, D.C., Jan. 2009

EPaDel Section of the Mathematical Association of America Meeting,

Villanova University, PA, Nov. 2006

Joint Mathematics Meetings, San Antonio, TX, Jan. 2006

Nineteenth Clemson Mini-Conference on Discrete Mathematics and Algorithms,
Clemson University, SC, Oct. 2004

Eleventh International Conference on Fibonacci Numbers and Their Applications,
Braunschweig, Germany, Jul. 2004

PROFESSIONAL MEMBERSHIPS

American Mathematical Society (AMS)

Association for Women in Mathematics (AWM)

Mathematical Association of America (MAA)

National Association of Mathematicians (NAM)

Society for Advancement of Chicanos/Hispanics & Native Americans in Science (SACNAS)

Women in Numbers (WIN)