Edray Herber Goins, PhD LHD

CONTACT INFORMATION	Pomona College Department of Mathematics and Statistics 610 North College Avenue Claremont, CA 91711	*Work:* (909) 621-8711 *Fax:* (909) 607-1247 *E-mail:* edray.goins@pomona.edu *WWW:* http://pages.pomona.edu/~ehga2017/index.html http://www.pomona.edu/directory/people/edray-goins
	1807 Elmhurst Circle Claremont, CA 91711	*Home:* (323) 251-7198

BRIEF BIO

Edray Herber Goins is Professor of Mathematics at Pomona College. He has worked as a researcher at both Harvard and the National Security Agency; and has taught at both Caltech and Purdue. Professor Goins has published over 25 journal articles in areas such as applied mathematics, graph theory, number theory, and representation theory; and on topics such as Diophantine equations, elliptic curves, and African Americans in mathematics. He has given nearly 250 invited addresses on his research, acted as a referee for nearly 20 different journals in mathematics, served on dozens of panels for the National Science Foundation (NSF), and been awarded more than $1,370,000 in external funding. Goins currently runs a federally-funded Research Experience for Undergraduates (REU) titled Pomona Research in Mathematics Experience (PRiME).

(A longer biography appears at the end of this curriculum vitae.)

EDUCATION

Stanford University, Stanford, California USA

Ph.D., Mathematics, September 1999
Dissertation Topic: "Elliptic Curves and Icosahedral Galois Representations"
Advisors: Daniel W. Bump, Karl C. Rubin

California Institute of Technology, Pasadena, California USA

B.S., Mathematics and Physics, June 1994
Advisors: Dinakar Ramakrishnan, Steven C. Frautschi

RESEARCH INTERESTS

Algebraic Geometry, Automorphic Forms, Class Field Theory, Commutative Algebra, Elliptic Curves, Galois Representations, Number Theory, Representation Theory

APPOINTMENTS

Claremont Graduate University, Claremont, California USA
Extended Graduate Faculty of Mathematics **April 2021 − April 2024**

Pomona College, Claremont, California USA
Professor of Mathematics **July 2018 − Present**

Purdue University, West Lafayette, Indiana USA
Professor of Mathematics **August 2017 − May 2018**
Associate Professor of Mathematics **August 2010 − August 2017**
Assistant Professor of Mathematics **August 2004 − August 2010**
Visiting Scholar **October 2000**

Inst. for Comp. and Exp. Research in Math (ICERM), Providence, Rhode Island USA
Visitor, Computational Aspects of the Langlands Program **September 2015 − December 2015**

California Institute of Technology, Pasadena, California USA
Taussky-Todd Instructor of Mathematics **September 2003 − August 2004**

Irvine Foundation Instructor of Mathematics   **August 2001 − August 2003**

Harvard University, Cambridge, Massachusetts USA
Visiting Scholar   **November 2007 − December 2007**
Visiting Scholar   **September 2001 − June 2002**
Visiting Scholar   **April 2000**

Max Planck Institut für Mathematik (MPIM), Bonn, Germany
Postdoctoral Fellow   **January 2001 − June 2001**

Mathematical Sciences Research Institute (MSRI), Berkeley, California USA
Postdoctoral Fellow   **August 2000 − December 2000**
Postdoctoral Fellow   **August 1999 − September 1999**

Institute for Advanced Study (IAS), Princeton, New Jersey USA
Member, School of Mathematics   **September 1999 − August 2000**

National Security Agency (NSA), Ft. George Meade, Maryland USA
Summer Internship   **June 1996 − August 1996**
Summer Internship   **June 1995 − August 1995**

EXTERNAL GRANTS **Pomona Research in Mathematics Experience**
Principal Investigator
Alexander J. Barrios, Co-PI   **June 2022 − May 2024**

This $548 786 National Science Foundation award (`DMS-2113782`) will provide two years of support for Pomona College to offer an eight week summer residential program to conduct research in Algebraic Geometry and Number Theory. The program, entitled Pomona Research in Mathematics Experience (PRiME), is an REU/Learning Community consisting of 15 undergraduates, 5 graduate students, and 5 faculty to conduct research in groups, vertically integrate mentoring, and provide professional development for students and staff alike. The main goals of the program are (1) to provide a nationally recruited group of undergraduates with an 8-week intensive summer research experience in Algebraic Geometry and Number Theory. and lead to new results worthy of publication or presentation at national meetings; (2) to position undergraduates to enter post-baccalaureate degree programs in the mathematical sciences; (3) to provide intensive mentoring and mentor training for faculty, postdocs, and grad students via vertically integrated clusters; and (4) to establish an extended cross-generational network and community of underrepresented minorities in Algebraic Geometry and Number Theory.

Center for Undergraduate Research in Mathematics (CURM) Minigrant
Principal Investigator
Robin T. Wilson, Co-PI   **May 2021 − May 2022**

This $25 000 subaward from CURM (`DMS-1722563`) will provide support to document the research done by mathematical scientists of the African Diaspora.

Goins and Robin Wilson (Cal Poly Pomona) will work together to hire a total of 13 undergraduates during the academic year from September 2021 through May 2022. The two groups will work on updating the MAD Pages, a website founded in 1997 by Scott Williams but recently updated and relaunched by Goins et al. The new "Mathematicians of the African Diaspora" currently features more than 700 profiles of mathematical scientists; we are looking to double the number of profiles.

The 13 students will have the following responsibilities each week: (1) Researching and Writing

Biographies: students will be required to produce a minimum of four biographies of mathematical scientists from the African Diaspora; (2) Database Quality Control: students will be required to update database information for a minimum of four profiles of mathematical scientists from the African Diaspora; and (3) Weekly Research Meeting: all 13 students and the two PIs will be required to attend a 2-hour group research meeting which will alternate locations between Cal Poly Pomona and Pomona College.

2021 African Diaspora Joint Mathematics Working Groups (ADJOINT)
Co-Principal Investigator
Hélène Barcelo, PI   **May 2021 − April 2022**

This $66 950 National Security Agency grant (`H98230-21-1-0021`) will provide support for activities for ADJOINT. The African Diaspora Joint Mathematics Workshop (ADJOINT) is a two-week summer activity designed for researchers with a Ph.D. in the mathematical sciences who are interested in conducting research in a collegial environment. The main objective of ADJOINT is to provide opportunities for in-person research collaboration to U.S. mathematicians, especially those from the African Diaspora, who will work in small groups of 4-5 mathematicians with research leaders on various research projects. Through this effort, MSRI aims to establish and promote research communities that will foster and strengthen research productivity and career development among its participants. The ADJOINT working groups are designed to catalyze research collaborations, increase the visibility of its researchers by facilitating their participation in and organization of conferences, and develop a sense of community among the participating mathematicians. The end goal of ADJOINT is to enhance the mathematical sciences and its community by positively affecting the research and careers of African American mathematicians and supporting their efforts to achieve full access and engagement in the broader research community.

Pomona Research in Mathematics Experience
Principal Investigator   **March 2021 − March 2022**

The $124 454 National Security Agency grant (`H98230-21-1-0015`) will provide one year of support for Pomona College to offer an eight week summer residential program for undergraduate students to conduct research in pure mathematics. The program, entitled Pomona Research in Mathematics Experience (PRiME) will host twelve undergraduates.

ADJOINT 2020
Co-Principal Investigator
Hélène Barcelo, PI; Anisah Nu'Man, Co-PI   **May 2020 − April 2023**

This $49 993 Alfred P. Sloan Foundation award (`G-2020-12602`) will provide support for activities for ADJOINT.

REU Site: Pomona Research in Mathematics Experience (PRiME)
Principal Investigator   **June 2018 − May 2021**

This $97 262 National Science Foundation grant (`DMS-1850909`) will provide one year of support for Pomona College to offer an eight week summer residential program for undergraduate students to conduct research in pure mathematics. The program, entitled Pomona Research in Mathematics Experience (PRiME) will host 12 undergraduates each summer. The main goals of the program are (1) to provide undergraduate students with a research experience in algebraic geometry and number theory with the aim of producing new results worthy of publication or presentation at a national mathematics meeting, and (2) to prepare undergraduates for a post-baccalaureate degree in mathematics. The program will also work to increase the diversity of mathematicians both at Pomona College and more broadly. The program directors will place a high importance on recruiting participants from groups traditionally underrepresented in mathematics. Additionally,

the directors of the program will invite mathematicians from underrepresented groups speak in a Summer REU Colloquium series in which they will discuss with the PRiME participants their professional journey.

National Association of Mathematicians Network of Opportunities Targeting Students and Faculty at HBCUs
Co-Principal Investigator
Ulrica Wilson, PI; Roselyn Williams, Co-PI **August 2018 – January 2020**

This $99 960 National Science Foundation award (HRD-1833234) will provide support for activities for the National Association of Mathematicians, Inc.

The Historically Black Colleges and Universities - Undergraduate Program (HBCU-UP) supports conferences that seek to increase the research opportunities of science, technology, engineering, and mathematics (STEM) students and faculty at HBCUs. Morehouse College will host the National Association of Mathematicians' (NAM) conference to encourage undergraduate students to pursue advanced degrees in mathematics. The conference will be held at Morehouse College on September 28-30, 2018. About one hundred students from HBCUs, as well as mathematics faculty and researchers, will attend this conference.

Undergraduate MATHFest and the NAM Faculty Conference on Research and Teaching Excellence are the two featured events at the conference. Conference activities at MATHFest are designed to improve the preparation and success of HBCU undergraduate students as they complete their baccalaureate degrees and enter graduate programs and careers in STEM disciplines. Activities at the Faculty Conference are designed to strengthen mathematics education and research at HBCUs. A key objective is to provide undergraduate students the opportunity to interact with a group of mathematics researchers and teachers and to learn about opportunities in various fields of mathematics.

2017 Field of Dreams Conference
Co-Principal Investigator
David Goldberg, PI **September 2017 – August 2018**

This $49 500 National Science Foundation award (DMS-1664256) will partially support the Field of Dreams Conference, to be held at the Renaissance St. Louis Airport Hotel, in St. Louis, MO, from November 4-6, 2016.

The Field of Drams conference is organized by the National Alliance for Doctoral Students in the Mathematical Sciences (the Alliance), an organization whose goal is to increase the number of students from backgrounds underrepresented in the mathematical sciences who earn doctorates in those fields. Approximately 200 students will attend the conference, and about 75% of those will be underrepresented minorities. The conference coordinates with the Alliance's Facilitated Graduate Admissions Process (F-GAP), which has helped place approximately 70 Alliance Scholars in graduate programs each of the last three years with almost 100% retention to this point. So, the conference is an essential part of a program to produce a more diverse professional mathematical workforce. In addition, there are events at the conference which assist faculty in mentoring practices and help academic departments transform their cultures to be more supportive of student success.

2016 Field of Dreams Conference
Co-Principal Investigator
David Goldberg, PI **December 2016 – November 2017**

This $30 000 National Science Foundation award (DMS-1664256) will partially support the Field of Dreams Conference, to be held at the Renaissance St. Louis Airport Hotel, in St. Louis, MO, from November 4-6, 2016.

REU Site: Purdue Research in Mathematics Experience (PRiME)
Principal Investigator
Jonathon Peterson, Co-PI   **June 2016 – May 2018**

This $230 982 National Science Foundation grant (`DMS-1560394`) will provide three years of support for Purdue University to offer an eight week summer residential program for undergraduate students to conduct research in pure mathematics. The program, entitled Purdue Research in Mathematics Experience (PRiME) will host eight undergraduates each summer.

Infinite Possibilities Conference (IPC)
Principal Investigator
Alejandra Alvarado,
Lily Khadjavi, and Tanya Moore, CO-PIs   **October 2014 – September 2015**

The $25 000 National Security Agency grant provided funding for a conference to be held at Purdue University from March 26–28, 2015. The 5th Infinite Possibilities Conference (IPC), which is the only such national meeting to focus on issues related to educating, encouraging and supporting minority women interested in mathematics and statistics, was to be jointly sponsored by Purdue and the non-profit organization Building Diversity in Science. The conference provides students at the undergraduate and graduate levels, as well as junior faculty, an opportunity to interact with peers and more established women mathematicians in a supportive and collegial atmosphere that is unique for a professional conference. One of the main goals of IPC is to establish connections between mentors and mentees and to provide role models for junior women mathematicians seeking to enter the field but concerned about the differences they see between themselves and traditional mathematicians.

The grant was transferred to Tanya Moore and Sastry Pantula, and the conference was held March 1-3, 2015 at Oregon State University.

Underrepresented Students in Topology and Algebra Research Symposium (USTARS)
Principal Investigator
Alejandra Alvarado, Syvillia Averett, Pamela Harris,
Candice Price, and Shannon Talbott, CO-PIs   **January 2013 – January 2014**

The $25 000 National Science Foundation grant (`DMS-1317928`) provided funding for a conference to be held at Purdue University from April 19–21, 2013. This was the third such meeting; the first two were held in April 2011 and 2012. The program consisted of a 18 research talks by underrepresented speakers, 75% given by graduate students, in addition to a keynote faculty speaker and two distinguished graduate student speakers. The meeting also included a research poster session for undergraduate students. A goal of the conference was to bring together young researchers in algebra and topology from diverse backgrounds and to expose undergraduate students to research opportunities.

INTERNAL GRANTS **Marian and Charles Holmes Endowment Performing Arts Fund** through the Holmes Performing Arts Fund Committee at Pomona College
Principal Investigator   **October 13, 2022 – June 30, 2023**

The $5 000 grant was used towards an honoraria for a new public lecture called "The 47 Lecture".

The inaugural lecture was a collaborative effort between the Department of Mathematics and Statistics, the Department of Music (esp. Melissa Givens), the Quantitative Skills Center (esp Travis Brown), the Huntley Bookstore, and the Hive. Eugenia Cheng visited Pomona College on Thursday, October 20 and Friday October 21, 2022 to (i) have a lunch discussion with faculty from the DEI+ cohorts in the Frank Blue Room with meals being provided by QSC; (ii) give the "47 Lecture" in Argue Auditorium in Estella Laboratory with a reception sponsored by Math & Stats and a book signing sponsored by Huntley Bookstore; (iii) have a lunch discussion with students from various cohorts in the Hive Commons with meals being provided by QSC; and (iv)

give an evening lecture / musical performance in Bridges Hall of Music in a joint performance with Melissa Givens and the Music Department.

Wig Fund Curriculum Development Grant through the Teaching & Learning Committee at Pomona College
Principal Investigator **September 12, 2022 – June 30, 2023**

The $1 000 grant was used towards an honoraria for a new public lecture called "The 47 Lecture".

Faculty Small Research Grant through the Academic Dean's Office at Pomona College
Principal Investigator **December 2020**

The $1 000 account was used pay for a pre-submission evaluator in preparation for a National Science Foundation (NSF) grant.

Faculty Travel Grant through the Academic Dean's Office at Pomona College
Principal Investigator **September 2019**

The $5 300 grant was used to purchase airfare for several undergraduates (Myles Ashitey, Brian Bishop, Alex Collados, Zakiya Jones, and Rohan Lopez) to attend NAM's Undergraduate MATH-Fest XXIX at Southern University in New Orleans, Louisiana. The Academic Dean's Office administers the Faculty Travel Fund for the purpose of supporting faculty attendance at professional and scholarly meetings.

Wig Fund Curriculum Development Grant through the Teaching & Learning Committee at Pomona College
Principal Investigator **July 2018 – May 2019**

The $600 grant was used to buy materials to prepare for classes during the 2018-19 Academic Year. The Wig Fund Curriculum Development Grants are meant to reimburse faculty for items such as books, videos and software; student assistants; field trips; travel for the applicant; honoraria for training the faculty member; and conference or workshop registration fees related to preparation for a course.

Start-Up Funds through the Academic Dean's Office at Pomona College
Principal Investigator **July 2018 – June 2021**

The $114 800 account was used in conjunction with an NSF REU grant to establish a Research Experience for Undergraduates (REU) at Pomona College.

ADVANCE Purdue Research in Mathematics Experience (PRiME) through the AD-VANCE at Purdue University
Subcontract Principal Investigator **June 2013 – August 2013**

The $10 000 grant was funded by an NSF grant awarded to ADVANCE Center for Faculty Success at Purdue University. The PI organized an eight-week summer program called "ADVANCE PRiME" which sought to form a community of mathematical research during the summer of 2013. The PI brought in seven outside speakers, women of color in the mathematical sciences, to discuss their professional journey from being an undergraduate student to being a member of the professoriate.

ADVANCE Purdue Research in Mathematics Experience (PRiME) through the AD-VANCE at Purdue University
SubcontractPrincipal Investigator **June 2012 – August 2012**

The $10 000 grant was funded by an NSF grant awarded to ADVANCE Center for Faculty Success at Purdue University. The PI organized an eight-week summer program called "ADVANCE PRiME" which sought to form a community of mathematical research during the summer of

2012. The PI brought in five outside speakers, women of color in the mathematical sciences, to discuss their professional journey from being an undergraduate student to being a member of the professoriate.

Squares and Cubes in Arithmetic Progressions through the Purdue Summer Research Opportunity Program (SROP)
Co-Principal Investigator
Sergio García Currás, Co-PI **June 2012 − July 2012**

The $1 000 grant was funded by the Purdue Summer Research Opportunities Program (SROP) as hosted by the Graduate School. The PI conducted research with Sergio García Currás, an undergraduate student at the University of Puerto Rico – Rio Piedras involved with SROP, on a project entitled "Squares and Cubes in Arithmetic Progressions."

AGEP Purdue Research in Mathematics Experience (PRiME) through the Midwest Crossroads Alliance for Graduate Education and the Professoriate (AGEP) at Purdue University
Principal Investigator **June 2011 − August 2011**

The $45 067 grant was funded by an NSF grant awarded to the Midwest Crossroads AGEP at Purdue University. The PI organized an eight-week summer program called "AGEP PRiME" which sought to form a community of mathematical research during the summer of 2011. The PI brought in five outside speakers to discuss their professional journey from being an undergraduate student to being a member of the professoriate.

Rational Distance Sets on Conic Sections through the Louis Stokes Alliance for Minority Participation (LSAMP) in Indiana
Co-Principal Investigator
Jonathan Blair, Co-PI **June 2011 − July 2011**

The $816 grant was funded by an NSF grant awarded to LSAMP Indiana at Purdue University. The PI conducted research with Jonathan D. Blair, an undergraduate student involved with LSAMP, on a project entitled "Rational Distance Sets on Conic Sections."

Summer Support through the Center for Faculty Success
Principal Investigator **June 2010 − August 2010**

The internal grant was for designing a course entitled "Great Issues in Mathematics."

Summer Faculty Grant through the Purdue Research Foundation
Principal Investigator **June 2006 − August 2006**

The internal grant was summer support for the PI. This grant was declined.

Awards and
Honors

	2019	Honorary Doctor of Humane Letters (LHD) from Cooper Union for the Advancement of Science and Art
	2019	Fellow of the Association of Women in Mathematics (AWM)
	2011	Ruth and Joel Spira Teaching Award, Purdue University
	2004	Emerging Scholar of the Year, Black Issues in Higher Education
	2003	ASCIT Teaching Award Nomination, California Institute of Technology
	1999	James W. Lyons Award for Service, Stanford University
	1999	Graduate Service Award, Graduate Student Council, Stanford University
	1999	Outstanding Graduate Student, Chicano/Latino Graduate Student Association, Stanford University
	1996	Outstanding Graduate Student, Black Community Services Center, Stanford University
	1994	Rodman W. Paul History Prize, California Institute of Technology
	1993	Doris S. Perpall Speaking Award for best presentation in the Humanities, Summer Undergraduate Research Fellowship, California Institute of Technology
	1993	Dean's Cup for Service, California Institute of Technology
	1989	Bronze Medal in Mathematics, Los Angeles Academic Decathlon

FELLOWSHIPS AND SCHOLARSHIPS	2008	Teaching for Tomorrow Fellowship Award, Purdue University
	1994 – 1999	National Physical Science Consortium Graduate Fellowship
	1994	National Science Foundation Graduate Research Fellowship (Honorable Mention)
	1993	Ebell of Los Angeles Philanthropic Foundation Scholarship
	1992, 1993	American Physical Society Scholarship
	1991, 1992	Morgan Ward Mathematics Prize, California Institute of Technology
	1990	Robert A. Millikan Physics Scholarship, California Institute of Technology
	1990	Sigma Pi Phi Scholarship
	1990	NAACP Roy A. Wilkins Scholarship
	1990	National Achievement Scholarship
	1989	National Merit Scholarship (Honorable Mention)

REFEREED PUBLICATIONS

1. With Amy Oden. Diary of a Black Mathematician: Finding Community. In "Count Me In: Community and Belonging in Mathematics". AMS MAA Press, Classroom Resource Materials, Volume 68 (2022); 241 pages.

2. With Rachel Davis. Arithmetic of Dihedral Origami. Contemporary Mathematics Series 776 (2022), pages 217-225. DOI: `https://doi.org/10.1090/conm/776/15613`

3. With Darren Glass, Béla Bajnok, Carolyn Yackel, Jenna Carpenter, Stephen Kennedy, Jeanette Shakalli, Ursula Whitcher, Dave Kung, Kathryn Kozak, Robert Ghrist, and Andrew Gelman. Reviews. American Mathematical Monthly, Volume 128, Number 2 (February 2021), pages 187-192. DOI: `https://doi.org/10.1080/00029890.2021.1853445`

4. With Amy Oden. Updated "MAD Pages" Website to be Unveiled October 9. Notices of the American Mathematical Society, Volume 68, Number 2 (February 2021), pages 254-255. DOI: `https://doi.org/10.1090/noti2224`

5. With Hélène Barcelo. MSRI's ADJOINT: African Diaspora Joint Mathematics Workshop. Notices of the American Mathematical Society, Volume 68, Number 2 (February 2021), pages 246-253. DOI: `https://doi.org/10.1090/noti2212`

6. With Alejandra Alvarado, Donatella Danielli, Rachel Davis, and Zenephia Evans. Difficult Dialogues in the Midwest: A Retrospective on the Impact of EDGE at Purdue University. In: S. D'Agostino, S. Bryant, A. Buchmann, M. Guinn, L. Harris (editors) "A Celebration of the EDGE Program's Impact on the Mathematics Community and Beyond". Association for Women in Mathematics Series, Volume 18 (September 2019). Springer, pages 55-65. DOI: `http://dx.doi.org/10.1007/978-3-030-19486-4_6`

7. The Ubiquity of Elliptic Curves. Notices of the American Mathematical Society, Volume 66, Number 2 (February 2019), pages 169-174. DOI: `http://dx.doi.org/10.1090/noti1789`

8. Lecture Sampler: "A Dream Deferred: 50 Years of Blacks in Mathematics". Notices of the American Mathematical Society, Volume 66, Number 1 (January 2019), pages 90-91. DOI: `http://dx.doi.org/10.1090/noti1771`

9. With Pamela E. Harris, Bethany Kubik, and aBa Mbirika. Lattice Point Visibility on Generalized Lines of Sight. The American Mathematical Monthly, Volume 125, Number 7 (August 2018), pages 593-601. DOI: `http://dx.doi.org/10.1080/00029890.2018.1465760`

10. Three Questions: The Journey of One Black Mathematician. Notices of the American Mathematical Society, Volume 65, Number 2 (February 2018), pages 144-147. DOI: `http://dx.doi.org/10.1090/noti1637`

11. With Asamoah Nkwanta. Riordan Matrix Representations of Euler's Constant γ and Euler's Number e. International Journal of Combinatorics, Volume 2016 (November 2016), Article ID 8324150, 9 pages. DOI: `http://dx.doi.org/10.1155/2016/8324150`

12. With Talitha Washington. On the Generalized Climbing Stairs Problem. Ars Combinatoria, Volume CXVII (October 2014), pages 183-190.

13. With Alejandra Alvarado. Arithmetic Progressions on Conic Sections. International Journal of Number Theory. Volume 9, Number 6 (July 2013), pages 1379-1393. DOI: `http://dx.doi.org/10.1142/S1793042113500322`

14. With Illya V. Hicks, Jing Ma, and Susan Margulies. Branch Decomposition Heuristics for Linear Matroids. Journal of Discrete Optimization. Volume 10, Issue 2 (May 2013), pages 102 - 119. DOI: `http://dx.doi.org/10.1016/j.disopt.2012.11.004`

15. With Talitha Washington. The Area of the Surface Generated by Revolving a Graph About Any Line. PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies, Volume 23, Issue 2 (2013), pages 121-132. DOI: `http://dx.doi.org/10.1080/10511970.2012.702708`

16. With Kevin Mugo. Points on Hyperbolas at Rational Distance. International Journal of Number Theory, Volume 8, Number 4 (2012), pages 911-922. DOI: `https://doi.org/10.1142/S1793042112500534`

17. Semi-Magic Squares and Elliptic Curves. Missouri Journal of Mathematical Sciences, Volume 22 (2010), Number 2, pages 102 - 107. DOI: `https://doi.org/10.35834/mjms/1312233140`

18. With Talitha Washington. Sphere-of-Influence Graphs. Wolfram Demonstrations Project. (February 4, 2010) `http://demonstrations.wolfram.com/SphereOfInfluenceGraphs/`

19. With Talitha Washington. A Tasty Combination: Multivariable Calculus and Differential Forms. The Pentagon: The Journal of Kappa Mu Epsilon, Fall 2009, pages 11-28.

20. Palindromes in Different Bases: A Conjecture of J. Ernest Wilkins. INTEGERS: The Electronic Journal of Combinatorial Number Theory, Volume 9 (2009), pages 725-734.

21. With Florian Luca and Alain Togbé. On the Diophantine Equation $x^2 + 2^\alpha 5^\beta 13^\gamma = y^n$. Algorithmic Number Theory Seminar (ANTS-VIII); LCNS 5011 (2008), pages 430-442. DOI: `https://doi.org/10.1007/978-3-540-79456-1_29`

22. With Alain Togbé. On Pythagorean Quadruplets. International Journal of Pure and Applied Mathematics, Volume 35 (2007), Number 3, pages 363-372.

23. With Davin Maddox. Heron Triangles via Elliptic Curves. Rocky Mountain Journal of Mathematics, Volume 36; (2005), Number 5, pages 1511-1526. DOI: `https://doi.org/10.1216/rmjm/1181069379`

24. Icosahedral $\mathbb{Q}$-curve Extensions. Math Research Letters 10 (2003), Number 2-3, pages 205-217. DOI: `https://dx.doi.org/10.4310/MRL.2003.v10.n2.a8`

25. A Ternary Algebra with Applications to Binary Quadratic Forms. Council for African-American Researchers in the Mathematical Sciences, Volume IV; Contemporary Mathematics 284 (2001), pages 7-12. DOI: https://doi.org/10.1090/conm/284/04695

26. Artin's Conjecture and Elliptic Curves. Council for African-American Researchers in the Mathematical Sciences, Volume III; Contemporary Mathematics 275 (2001), pages 39-51. DOI: https://doi.org/10.1090/conm/275/04489

27. With Melvin R. Currie. The Fractional Parts of $\frac{n}{k}$. Council for African-American Researchers in the Mathematical Sciences, Volume III; Contemporary Mathematics 275 (2001), pages 13-31. DOI: https://doi.org/10.1090/conm/275/04487

28. With Melvin R. Currie. On the Distribution of Fractional Parts. Internal publication of the National Security Agency. (1997).

PUBLICATIONS IN PRESS

29. with Kevin Iga, Jordan Kostiuk, and Kory Stiffler. The signed monodromy group of an Adinkra. Annals de L'Institut Henri Poincaré D - Combinatorics, Physics and their Interactions, Accepted 2020.

PUBLICATIONS SUBMITTED

30. With Tesfa Asmara, Erik Imathiu-Jones, Maria Maalouf, Isaac Robinson, and Sharon Sheha Spaulding. Critical Points of Toroidal Belyĭ Maps. Submitted 2022.

31. Explicit Descent via 4-Isogeny on an Elliptic Curve, 20 pages. Submitted 2016.

32. With Alejandra Alvarado and Luis Melara. Numerical Approximation of Coefficients of Belyĭ Maps. Submitted 2016.

PUBLICATIONS IN PROGRESS

33. With Lloyd Kilford. Counting Mod ℓ Solutions via Modular Forms.

34. Extending the Serre-Faltings Method for $\mathbb{Q}$-Curves, 15 pages.

35. With Garikai Campbell, Heron Triangles, Diophantine Problems, and Elliptic Curves, 15 pages.

BOOKS AND MONOGRAPHS

36. Editor with Emille Davie Lawrence and Omayra Ortega. Proceedings of the Golden Anniversary Celebration of the National Association of Mathematicians. AMS Contemporary Mathematics Series (CONM), Volume 759 (2020). DOI: https://doi.org/10.1090/conm/759

37. Editor with Donald King, Gaston N'Guérékata, and Alfred Noël. Council for African American Researchers in the Mathematical Sciences, Volume V; Contemporary Mathematics 467 (2008), 152 pages. DOI: http://dx.doi.org/10.1090/conm/467

NEWSPAPER AND MAGAZINE ARTICLES

1. With Amy Oden. Vivienne, Scott and Me: Updating the MAD Pages for a New Generation. MAA Focus Newsmagazine. Volume 40, Number 5 (October/November 2020), pages 16-19.

2. With Tarik Aougab, Federico Ardila, Jayadev Athreya, Christopher Hoffman, Autumn Kent, Lily Khadjavi, Cathy O'Neil, Priyam Patel, and Katrin Wehrheim. Letters to the Editor: Boycott collaboration with police. Notices of the American Mathematical Society, Volume 67, Number 9 (October 2020).

3. Instilling Pride in Our Black Community: Michael Dyson Visits Caltech. The California Tech, Volume XCV, Number 25 (May 6, 1994).

4. Shakespeare-With a Twist: A Hip-Hip Version of "Romeo and Juliet". The California Tech, Volume XCV, Number 25 (May 6, 1994).

5. It's Part of Our Past: whose fault is it? (part 2 of 2). The California Tech, Volume XCV, Number 19 (March 4, 1994).

6. It's Part of Our Past: whose fault is it? (part 1 of 2). The California Tech, Volume XCV, Number 18 (February 25, 1994).

7. It's part of our past: more on the Morehouse Men. The California Tech, Volume XCV, Number 17 (February 18, 1994).

8. It's part of our past: The Morehouse Men at Tech. The California Tech, Volume XCV, Number 16 (February 11, 1994).

9. It's part of our past: Joseph Rhodes, Jr.. The California Tech, Volume XCV, Number 15 (February 4, 1994).

10. It's part of our past: how Caltech's under-represented students organized themselves. The California Tech, Volume XCV, Number 14 (January 28, 1994).

11. It's part of our past: Dr. King at Caltech. The California Tech, Volume XCV, Number 13 (January 21, 1994).

12. It's part of our past: a look at the history of Caltech's Black students. The California Tech, Volume XCV, Number 12 (January 14, 1994).

13. It's part of our past: A look at the history of Caltech's Black students. The California Tech, Volume XCV, Number 11 (January 7, 1994).

14. Letter to the editor: Vargas article incorrect. The California Tech, Volume XCV, Number 6 (October 29, 1993).

WEB BLOGS

1. Updating the MAD Pages for a New Generation. Center for Minorities in the Mathematical Sciences (CMMS) Blog (October 9, 2020).

2. Why I'm leaving a Research I University for a Liberal Arts College. AMS inclusion/exclusion Blog (September 15, 2017).

3. CAARMS23. AMS inclusion/exclusion Blog (July 25, 2017).

4. Two Days with a Chicano Mathematician: Bill Velez visits Purdue. AMS inclusion/exclusion Blog (April 26, 2017).

5. Harry Potter and the Order of Infallible Idols. AMS e-Mentoring Network in the Mathematical Sciences (March 1, 2017).

6. Hidden Figures: How and Why We Brought it to the 2017 JMM. AMS inclusion/exclusion Blog (February 16, 2017).

7. What is this "Graduate School thing" again? AMS e-Mentoring Network in the Mathematical Sciences (October 26, 2016).

8. The Ubiquity of Pi Day: It's Not Just for Math Geeks. AMS e-Mentoring Network in the Mathematical Sciences (March 15, 2014).

9. How Do I Find Money for Graduate School? AMS e-Mentoring Network in the Mathematical Sciences (September 15, 2013).

10. How do I find research projects for my students? AMS e-Mentoring Network in the Mathematical Sciences (February 19, 2013).

FEATURED IN
MEDIA OUTLETS

1. Edray Goins is Interviewed by David Zierler: Part 1 of 6, Part 2 of 6, Part 3 of 6, Part 4 of 6, Part 5 of 6, Part 6 of 6. Caltech Heritage Project's YouTube Channel (September 26, 2022).

2. Pomona and Cal Poly students team up to document Black contributions to mathematics. The Student Life (March 10, 2022).

3. Edray Goins on being a Black mathematician, building community, and confronting racism in academia. The Student Life (February 17, 2022).

4. James LuValle, a chemist who broke the colour barrier. ChemistryWorld (November 21, 2021).

5. Meeting My Heroes. Blog posts and articles from the Royal Society (October 12, 2021).

6. Modern Mathematics Confronts Its White, Patriarchal Past. Scientific American (August 12, 2021).

7. Mission to diversify mathematics pushes professor to leave top spot. Spectrum News 1 (June 29, 2021).

8. Interview with Edray Goins, Part I. Caltech Archives Oral History Project (April 1, 2021).

9. Mathematics Professor Edray Goins Awarded $124,454 Grant from the National Security Agency. Pomona College News Service (March 29, 2021).

10. 'It would have been a laughingstock': Hoosier lawmakers nearly passed the Indiana Pi Bill in 1897. WRTV Indianapolis (March 14, 2021).

11. Edray Goins - BHM - GTMS 2021. Gregory Battipaglia's YouTube Channel (March 11, 2011).

12. On "The Black Mathematician Chronicles: Our Quest to Update the MAD Pages". Rachel J. Crowell's AMS Joint Mathematics Meetings 2021 Blog (January 11, 2021).

13. Math Master. Angela Ross's SoCal Voices Podcast (November 4, 2020).

14. It All Adds Up. Chris Clarke's Something About Food? Podcast (October 27, 2020).

15. Humble Beginnings To One of The Top Mathematicians In The Country: A Black Mathematician's Story. Marion Nchangwie Santo's YouTube Channel (July 14, 2020).

16. Mathematical Lives: A Profile of Edray Goins. Stanford University Department of Mathematics Webpage (June 19, 2020).

17. A Day in the Life: What's It Really Like to Be a Mathematician or Statistician?. Don Hutcheson's "Discover Your Talent - Do What You Love" Podcast (June 4, 2020).

18. Pomona College Sagecast: Backstories with Professor Edray Goins (May 6, 2020).

19. MEET a Mathematician! - Edray Goins (April 21, 2020).

20. Lack of diversity in his field has troubled this mathematician. Science News for Students (April 14, 2020).

21. Why Did I Choose Pomona? Pomona College Student Blog (January 2020).

22. A Letter for Incoming Black Students, from a Black Student. Pomona College Student Blog (September 2019).

23. Inclusion for Black Mathematicians: Q&A with Edray Goins. Insight Into Diversity (August 19, 2019).

24. Mathematician Edray Goins Visits BEAM at Harvey Mudd (July 10, 2019).

25. The Cooper Union's 160th Commencement took place on Tuesday May 21, 2019 at 10:30 AM in the Great Hall. Professor Edray Goins of Pomona College gave the keynote address. Cooper Union YouTube Channel (May 21, 2019).

26. Happy Pi Day. Indiana once tried to define pi as 3.2. The bill almost passed. ABC News (March 14, 2019).

27. Episode 2: Pi is Dead! Long Live Pi! Stephen Ornes' "Calculated" Podcast (March 12, 2019).

28. Opinion: Will John Gates be the change Purdue desperately needs? Purdue Exponent (February 28, 2019).

29. Facing Deep Isolation as an Accomplished Black Mathematician. Dreambox Learning Blog (February 28, 2019).

30. Baylor unveils bust honoring its 1st black professor, 24 years after her death. Waco Tribune Herald (February 26, 2019).

31. What I Learned While Reporting on the Dearth of Black Mathematicians. New York Times (February 20, 2019).

32. Black Mathematicians Sound Off On Inequality. Colorlines (February 19, 2019).

33. For a Black Mathematician, What It's Like to Be the 'Only One'. New York Times (February 18, 2019).

34. The Voices of Black Mathematicians. Scientific American Blog (February 13, 2019).

35. A Dream Deferred: 50 Years of Blacks in Mathematics. AMS Blog January 18, 2019).

36. A Dream Deferred: 50 Years of Blacks in Mathematics. YouTube (January 17, 2019).

37. Interview with AMS Public Awareness Officer Mike Breen about MAA Invited Address. Mike Breen (January 17, 2019).

38. How Abstract Math Can Analyze Social Injustice. Science Friday Live (June 22, 2018).

39. Rudy L. Horne dies at 49; Chicago native checked the math in 'Hidden Figures'. Chicago Sun Times (January 21, 2018).

40. 93.1 FM WIBC Interview with Ray Steele about the Indiana Pi Bill. Ray Steele (March 13, 2015).

41. 2004 Emerging Scholars of the Year – Taking the Tough Road. Black Issues in Higher Education (January 15, 2004).

42. Caltech Students Affected By L.A. Riots, King Verdict. The California Tech (May 22, 1992).

43. L.A. Effort Guides Blacks to Colleges. San Francisco Examiner (April 29, 1990).

44. 2 L.A. Students Win Merit Scholarships for Blacks. Los Angeles Times (March 9, 1990).

INVITED TALKS

1. TBA
MAA Rocky Mountain Section Spring 2023 Meeting
Black Hills State University, Spearfish, South Dakota   April 21-22, 2023

2. TBA
MAA EPaDel (Eastern Pennsylvania and Delaware) Spring 2023 Section Meeting
Penn State Brandywine, Media, Pennsylvania   April 15, 2023

3. TBA
2023 KYMAA (Kentucky Section of the MAA) Annual Meeting
Georgetown College, Georgetown, Kentucky   March 31-April 1, 2023

4. Clocks, Parking Garages, and the Solvability of the Quintic: A Friendly Introduction to Monodromy
MAA Golden Section 2023 Annual Meeting
Santa Rosa Junior College, Santa Rosa, California   February 25, 2023

5. The Significance of the ADJOINT: Reflections on the "African Diaspora Joint Mathematics Workshop"
Mathematics Colloquium
Howard University, Washington, District of Columbia   January 27, 2023

6. TBA
People Reaching Intuition in Mathematics for Empowerment Program (PRIME) Program
Youngstown State University, Youngstown, Ohio   January 18, 2023

7. The Significance of the ADJOINT: Reflections on the "African Diaspora Joint Mathematics Workshop"
Mathematics Colloquium
Xavier University, New Orleans, Louisiana   January 13, 2023

8. Monodromy Groups of Belyĭ Lattès Maps
AMS Special Session on "Number Theory at Non-PhD Granting Institutions"
Joint Mathematics Meetings
Boston, Massachusetts   January 6, 2023

9. Panel on "A DEI Perspective on Undergraduate Research"
   Joint Mathematics Meetings
   Boston, Massachusetts   January 4, 2023

10. Distance Makes the Math Grow Deeper: Rational Distance Sets, Nate Dean, and Me
    Pi Mu Epsilon J. Sutherland Frame Lecture
    Joint Mathematics Meetings
    Boston, Massachusetts   January 4, 2023

11. Meet a Mathematician @ MoMath
    Museum of Mathematics, New York, New York   December 15, 2022

12. The Significance of the ADJOINT: Reflections on the "African Diaspora Joint Mathematics
    Workshop"
    Mathematics Colloquium
    Jackson State University, Jackson, Mississippi   November 10, 2022

13. A Survey of Diophantine Equations
    Ohio Section of the MAA Fall Meeting
    Cedarville University, Cedarville, OH   October 29, 2022

14. Is It Fair To Ask Our Minoritized Students To Major In Mathematics?
    Ohio Section of the MAA Fall Meeting
    Cedarville University, Cedarville, OH   October 28, 2022

15. Addressing Anti-Black Racism in Our Departments
    Departmental Colloquium
    Montana State University, Bozeman, Montana   October 17, 2022

16. Quasi-Critical Points of Toroidal Belyĭ Maps
    Departmental Colloquium
    Montana State University, Bozeman, Montana   October 17, 2022

17. The Significance of the ADJOINT: Reflections on the "African Diaspora Joint Mathematics
    Workshop"
    Johnny L. Houston Mathematical Sciences Lecture Series
    Elizabeth City State University, Elizabeth City, North Carolina   October 6, 2022

18. Panel on "Running an REU"
    Math Teaching Group
    Rutgers University, Piscataway, New Jersey   October 3, 2022

19. Addressing Anti-Black Racism in Our Departments
    MAA Iowa Section NExT Fall 2022 Meeting
    Coe College, Cedar Rapids, Iowa   September 30, 2022

20. A Survey of Diophantine Equations
    MAA Iowa Section Fall 2022 Meeting
    Coe College, Cedar Rapids, Iowa   September 30, 2022

21. Visualizing Toroidal Belyĭ Pairs
    School of Mathematics and Statistical Sciences Colloquium
    Arizona State University, Tempe, Arizona   September 22, 2022

22. Addressing Anti-Black Racism in Our Departments
    Diversity, Equity, Inclusion, and Belonging (DEIB) Talk
    Arizona State University, Tempe, Arizona   September 22, 2022

23. A Survey of Diophantine Equations
    Department of Mathematics Colloquium
    Hartwick College, Oneonta, New York   September 16, 2022

24. Is It Fair To Ask Our Minoritized Students To Major In Math?
Conversation on Diversity in STEM
Hartwick College, Oneonta, New York   September 16, 2022

25. Panelist for "Building Community and Belonging in Mathematics"
MAA MathFest
Philadelphia, Pennsylvania   August 6, 2022

26. Panelist for "Preparing for Academic Leadership"
Latinx in the Mathematical Sciences Conference 2022 (LatMath)
Institute for Pure and Applied Mathematics, Los Angeles, California   July 9, 2022

27. Panel Moderator for "Best Practices Towards a More Diverse and Inclusive Mathematical
Community"
2022 International Congress of Mathematicians (ICM2022)
Virtual Conference   July 8, 2022

28. Panelist for "How to Run a Successful REU"
Lunch in the time of COVID
Virtual Seminar   May 24, 2022

29. 1968 via the California Tech: Social Upheavals, Women as Undergraduates, and the Indefati-
gable Joseph Rhodes
"Contextualizing Engineering and Applied Science: History, Ethics, and Identity in STEM"
Seminar Series and Discussion Groups
California Institute of Technology, Pasadena, California   May 16, 2022

30. Visualizing Toroidal Belyĭ Pairs
Mathematics Colloquium
University of California, Berkeley, California   May 5, 2022

31. A Black Man's Journey from South Central to Studying Dessins d'Enfants
Discussion at the Mississippi School for Mathematics and Science
Mississippi School for Mathematics and Science, Columbus, Mississippi April 26, 2022

32. Addressing Anti-Black Racism in Our Departments
"Developing Inclusive Learning Experiences for Quantitative Skills" Webinar
University of Baltimore, Baltimore, Maryland   April 19, 2022

33. Spring 2022 Postdoctoral Scholars Panel on "Diversity, Equity, and Inclusion"
Mathematical Sciences Research Institute, Berkeley, California   April 14, 2022

34. Visualizing Toroidal Belyĭ Pairs
Department of Mathematics and Statistics Colloquium
Wake Forest University, Winston-Salem, North Carolina   April 14, 2022

35. Pomona Research in Mathematics Experience (PRiME): Reflections on a Research Learning
Community
Mathematical Sciences Colloquium
High Point University, High Point, North Carolina   April 13, 2022

36. A Survey of Diophantine Equations
MAA Kansas Section (KSMAA) Meeting
Benedictine College, Atchison, Kansas   April 9, 2022

37. Panelist for "Holding AMS Sectional Meetings in Localities with Discriminatory Practices"
Committee on Meetings and Conferences (CoMC) Panel at the 2022 JMM
Joint Mathematics Meeting
Seattle, Washington   April 9, 2022

38. MADDER: Mathematicians of the African Diaspora Database's Ensemble of Researchers
AMS Special Session "Collaborative undergraduate research: Experiences with CURM"

Joint Mathematics Meeting
Seattle, Washington   April 8, 2022

39. Addressing Anti-Black Racism in Our Departments
    2022 MAA Project NExT Lecture on Teaching and Learning
    Joint Mathematics Meetings
    Seattle, Washington   April 7, 2022

40. Monodromy Groups of Compositions of Belyĭ Maps
    MSRI Special Session on the "African Diaspora Joint Mathematics Workshop (ADJOINT)"
    Joint Mathematics Meeting
    Seattle, Washington   April 6, 2022

41. Is It Fair To Ask Our Minoritized Students To Major In Mathematics?
    MAA Southwestern Section + ArizMATYC Joint Conference
    Arizona State University, Mesa, Arizona   April 1, 2022

42. Mentoring that Uplifts Amidst Circumstances that Destroy: Claytor, Malone-Mayes, and the
    True Legacy of R. L. Moore
    Math 290: Special Topics in the History of Mathematics
    Duke University, Durham, North Carolina   March 30, 2022

43. A Survey of Diophantine Equations
    Graduate Student Seminar Course
    Colorado State University, Fort Collins, Colorado   March 10, 2022

44. PRiME: Reflections on a Research Learning Community
    Mathematics Colloquium
    University of Arizona, Tucson, Arizona   March 3, 2022

45. MADDER: Mathematicians of the African Diaspora Database's Ensemble of Researchers
    HOM SIGMAA: History of Mathematics Special Interest Group of the MAA
    Virtual Seminar   March 2, 2022

46. Navigating Mathematical Spaces While Black
    Montgomery County Community College
    Montgomery County, Pennsylvania   February 10, 2022

47. Crash Course in Number Theory: A Survey of Diophantine Equations
    Online Undergraduate Resource Fair for the Advancement and Alliance of Marginalized Mathematicians (OURFA^{2}M^2)
    Virtual Conference   December 4, 2021

48. Critical Points of Toroidal Belyĭ Maps
    Virtual math seminar on open conjectures in Number Theory and Arithmetic Geometry (VaNTAGe)
    Virtual Seminar   August 31, 2021

49. A Black Man's Journey from South Central to Studying Dessins d'Enfants
    Causeway Post-baccalaureate Program
    Chicago, Illinois   July 29, 2021

50. A Black Man's Journey from South Central to Studying Dessins d'Enfants
    Math Summer Program for Inclusive Excellence (MATH SPIE)
    University of Connecticut, Storrs, Connecticut   June 30, 2021

51. Career Development Seminar: Diversity, Equity, and Inclusion
    Program in "Mathematical Problems in Fluid Dynamics"
    Mathematical Sciences Research Institute, Berkeley, California   May 7, 2021

52. Panelist for "Who is Benefitting from Distance Learning and Which Practices Need to Stay?"
    "Pivoting Back" Virtual Workshop Series – College Bridge K-16 STEM Forums
    College Bridge, Duarte, California   May 5, 2021

53. Horizons Seminar
Panel as part of the Horizons Lecture
Princeton University, Princeton, New Jersey   April 29, 2021

54. Archiving Communities of Resilience and Resistance in Caltech's Present and Past
Caltech Alumni Association Panel Discussion
California Institute of Technology, Pasadena, California   April 27, 2021

55. A Dream Deferred: 50 Years of Blacks in Mathematics
36th Annual Willie B. Rajanna Memorial Lecture and Honors Award Ceremony
Morgan State University, Baltimore, Maryland   April 22, 2021

56. A Dream Deferred: 50 Years of Blacks in Mathematics
2021 Class of '42 Lecture
Bridgewater State University, Bridgewater, Massachusetts   April 8, 2021

57. A Survey of Diophantine Equations
Mathematics Research Seminar
Bridgewater State University, Bridgewater, Massachusetts   April 8, 2021

58. Mentoring that Uplifts Amidst Circumstances that Destroy: Claytor, Malone-Mayes, and the
True Legacy of R. L. Moore
Math 290: Special Topics in the History of Mathematics
Duke University, Durham, North Carolina   April 2, 2021

59. Visualizing Toroidal Belyĭ Pairs
Mid-Atlantic Seminar On Numbers (MASON V)
Virtual   March 27, 2021

60. A Survey of Diophantine Equations
Mathematics Colloquium
Medgar Evers College, Brooklyn, New York   March 25, 2021

61. Umoja Learning Community
Los Angeles Pierce College, Woodland Hills, California   March 23, 2021

62. Panel Discussion "Why You Should Consider Doctoral Education or the Professoriate"
15th Annual WAESO Student Research Conference
Western Alliance to Expand Student Opportunities LSAMP
Arizona State University, Tempe, Arizona   March 20, 2021

63. A Dream Deferred: 50 Years of Blacks in Mathematics
Mosaic Lecture
Grand Valley State University, Allendale, Michigan   March 16, 2021

64. A Black Man's Journey from South Central to Studying Dessins d'Enfants
2021 UCLA Mathematics Department's Curtis Center Mathematics and Teaching Conference
University of California
Los Angeles, California   March 6, 2021

65. Clocks, Parking Garages, and the Solvability of the Quintic: A Friendly Introduction to Mon-
odromy
ICMS Public Lecture Series
Internat'l Centre for Mathematical Sciences, Edinburgh, United Kingdom   March 2, 2021

66. A Dream Deferred: 50 Years of Blacks in Mathematics
C. Dwight Lahr Lecture
Dartmouth College, Hanover, New Hampshire   February 25, 2021

67. Visualizing Toroidal Belyĭ Pairs
Department Colloquium
Dartmouth College, Hanover, New Hampshire   February 25, 2021

68. Mentoring that Uplifts Amidst Circumstances that Destroy: Claytor, Malone-Mayes, and the True Legacy of R. L. Moore
2021 Gulf States Math Alliance Conference
Virtual								February 19, 2021

69. Looking for Dr. Green: A Workshop on Uncovering Historical Departmental Data on Underrepresented Students
ParaDIGMS Workshop
Virtual								February 9, 2021

70. On Challenges Facing Math & Physics
Caltech-MIT Forum for Equity
California Institute of Technology, Pasadena, California				January 28, 2021

71. The Souls of Black Folk: Notes from the Diary of a Black Mathematician
Diversity and Inclusion Symposium
Leiden University of the Netherlands						January 22, 2021

72. The Black Mathematician Chronicles: Our Quest to Update the MAD Pages
AMS Special Session "History of Mathematics, II"
Joint Mathematics Meetings
Washington, District of Columbia						January 8, 2021

73. Visualizing Toroidal Belyĭ Pairs
AMS Special Session "A Showcase of Number Theory at Undergraduate Institutions"
Joint Mathematics Meetings
Washington, District of Columbia						January 6, 2021

74. Fireside Chat with CEO Ellen Kullman
Google Carbon Group
Virtual								December 11, 2020

75. A Survey of Diophantine Equations
Mathematics Colloquium
University of Alabama, Huntsville, Alabama					December 4, 2020

76. A Survey of Diophantine Equations
Math Club Colloquium
San Francisco State University, San Francisco, California				December 2, 2020

77. A Dream Deferred: 50 Years of Blacks in Mathematics
Anti-Racism Institute "Social Inclusion Cafe"
Shippensburg University, Shippensburg, Pennsylvania				November 19, 2020

78. An Introduction to Dessins d'Enfants
GLU Seminar
Geometry Labs United							November 17, 2020

79. Guided Discussion "Best Practices for Mentoring Graduate Students"
Virtual Field of Dreams Conference
Virtual								November 6, 2020

80. The Black Mathematician Chronicles: Our Quest to Update the MAD Pages
Black Heroes of Mathematics Conference – a virtual conference hosted from the Great Britain
British Society for the History of Mathematics
Essex, England							October 27, 2020

81. Race and STEM: An Intimate Discussion on an Uncomfortable Topic
CSU Science Deans Retreat
Virtual								October 22, 2020

82. Documenting the History of Black Mathematicians
AMS Education Webinar							October 9, 2020

83. Panel on "How (and Why) to Write Diversity Statements"
Texas A&M University
College Station, Texas   October 7, 2020

84. A Tour of Some Black Mathematicians
MESA Program
San Bernardino Valley College, San Bernardino, California   September 15, 2020

85. A Survey of Diophantine Equations
Pepperdine University Math Colloquium
Malibu, California   September 8, 2020

86. A Survey of Diophantine Equations
SPIRAL Colloquium Series
Washington, District of Columbia   August 6, 2020

87. Panel on "Mentoring and Being Mentored"
Lunch in the Time of COVID
Virtual Seminar (Zoom)   July 17, 2020

88. What is the National Association of Mathematicians, Inc.?
Center for Undergraduate Research in Mathematics (CURM) Seminar
Virtual Seminar (Zoom)   May 20, 2020

89. A Survey of Diophantine Equations
Math For All Conference
Tulane University, New Orleans, Louisiana   March 6-7, 2020

90. ADJOINT: The Genesis of an Idea
MESCal Unconference on Equity and Inclusivity in the Mathematical Sciences
California State Polytechnic University, Pomona, California   February 22, 2020

91. A Dream Deferred: 50 Years of Blacks in Mathematics
Keynote Address
STEMulate IDS Conference: Inclusivity and Diversity and STEM
Georgia State University, Atlanta, Georgia   February 20, 2020

92. Metabelian Galois Representations
Algebraic Geometry Seminar
Brown University, Providence, Rhode Island   October 18, 2019

93. A Dream Deferred: 50 Years of Blacks in Mathematics
Horizons Seminar
Brown University, Providence, Rhode Island   October 18, 2019

94. Clocks, Parking Garages, and the Solvability of the Quintic:
A Friendly Introduction to Monodromy
2019 Pacific Math Alliance Meeting
California State University at East Bay, Hayward, California   October 12, 2019

95. Clocks, Parking Garages, and the Solvability of the Quintic:
A Friendly Introduction to Monodromy
MESA Program
San Bernardino Valley College, San Bernardino, California   October 8, 2019

96. Metabelian Galois Representations
Special Session on Hodge Theory in Honor of Donu Arapura's 60th Birthday
University of Wisconsin, Madison, Wisconsin   September 15, 2019

97. Generating Functions
BEAM Summer Away Colloquium
Claremont, California   July 6, 2019

98. *ABC* Triples in Families
Number Theory Seminar
University of California, Irvine, California   April 18, 2019

99. Monodromy Groups of Compositions of Belyĭ Maps
Western Algebraic Geometry Seminar (WAGS), Berkeley, California   April 13, 2019

100. Monodromy Groups of Compositions of Belyĭ Maps
Origami, Belyĭ Maps, and Dessins d'Enfants
AWM Research Symposium
Rice University, Houston, Texas   April 7, 2019

101. Clocks, Parking Garages, and the Solvability of the Quintic:
A Friendly Introduction to Monodromy
CSULA Math Club
California State University, Los Angeles, California   March 26, 2019

102. Where Have the Black Students Gone?: A Chronicle of Caltech's Black Alumni
Caltech Center for Diversity
California Institute of Technology, Pasadena, California   February 19, 2019

103. A Dream Deferred: 50 Years of Blacks in Mathematics
MAA Invited Address
Joint Mathematics Meetings
Baltimore, Maryland   January 17, 2019

104. Fuchsian Differential Equations with Prescribed Monodromy:
An Introduction to Solving a Quintic Without Using Radicals
AMS Special Session: "A Showcase of Number Theory at Undergraduate Institutions"
Joint Mathematics Meetings
Baltimore, Maryland   January 16, 2019

105. Clocks, Parking Garages, and the Solvability of the Quintic:
A Friendly Introduction to Monodromy
MAA Southern California - Nevada Sectional Meeting
Scripps College, Claremont, California   October 27, 2018

106. Clocks, Parking Garages, and the Solvability of the Quintic:
A Friendly Introduction to Monodromy
Riverside Mathematics Workshop for Excellence and Diversity
University of California, Riverside, California   October 19, 2018

107. Diary of a Black Mathematician: From Research I to Liberal Arts
Strategies to Synergize Culture in the Learning and Doing of Mathematics
MAA MathFest, Denver, Colorado   August 4, 2018

108. Toroidal Belyĭ Pairs, Toroidal Graphs, and their Monodromy Groups
Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI)
Miami University, Oxford, Ohio   July 12, 2018

109. Yes, Even You Can Bend It Like Beckham
Advanced Mathematics Program (AMP) Summer School Speaker Series
University of California, Riverside, California   July 6, 2018

110. Yes, Even You Can Bend It Like Beckham
Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP)
Mathematical Sciences Research Institute, Berkeley, California   July 3, 2018

111. What is Infinity?
Bridge to Enter Advanced Mathematics (BEAM) 6: LA
Rise Kohyang Middle School, Los Angeles, California   June 22, 2018

112. Metabelian Galois Representations
Automorphisms on Riemann Surfaces and Related Topics
AMS Spring Western Sectional Meeting, Portland, Oregon   April 14, 2018

113. Toroidal Belyĭ Pairs, Toroidal Graphs, and their Monodromy Groups
Arithmetic of Algebraic Curves Conference
University of Wisconsin at Madison, Madison, Wisconsin   April 6, 2018

114. Yes, Even You Can Bend It Like Beckham
Mathematics Colloquium
University of Montana, Missoula, Montana   March 19, 2018

115. Metabelian Galois Representations
Coloquio de Matemática (PUCV-UTFSM-UV)
Instituto de Matemáticas/Pontificia Universidad Católica, Valparaíso, Chile   March 16, 2018

116. Indiana Pols Forced to Eat Humble Pi: The Curious History of an Irrational Number
Instituto de Matemáticas/Pontificia Universidad Católica, Valparaíso, Chile   March 14, 2018

117. Toroidal Belyĭ Pairs, Toroidal Graphs, and their Monodromy Groups
Mathematics Colloquium
Purdue Northwest – Westville Campus, Westville, Indiana   February 16, 2018

118. Metabelian Galois Representations
Front Range interested in Algebra, GeoMEtry and Number Theory (FRAGMENT) Seminar
Colorado State University, Ft. Collins, Colorado   February 8, 2018

119. Toroidal Belyĭ Pairs, Toroidal Graphs, and their Monodromy Groups
Mathematics Colloquium
DePaul University, Chicago, Illinois   January 19, 2018

120. Yes, Even You Can Bend It Like Beckham
Mathematics Club
DePaul University, Chicago, Illinois   January 19, 2018

121. Panelist for "Project NExT Panel: Assessing and Addressing Diverse Mathematical Backgrounds in the Classroom"
Joint Mathematics Meetings
San Diego, California   January 11, 2018

122. Panelist for "Strategies for Diversifying Graduate Mathematics Programs"
Joint Mathematics Meetings
San Diego, California   January 10, 2018

123. Toroidal Belyĭ Pairs, Toroidal Graphs, and their Monodromy Groups
Mathematics Colloquium
University of Texas, Arlington, Texas   November 10, 2017

124. Yes, Even You Can Bend It Like Beckham
Mid Cities Math Circle
University of Texas, Arlington, Texas   November 9, 2017

125. Toroidal Belyĭ Pairs, Toroidal Graphs, and their Monodromy Groups
Department of Mathematics Colloquium
University of Washington, Seattle, Washington   October 6, 2017

126. A Survey of Diophantine Equations
Mathematics Colloquium
Spelman College, Atlanta, Georgia   September 26, 2017

127. A Survey of Diophantine Equations
Mathematics Colloquium
Morehouse College, Atlanta, Georgia   September 14, 2017

128. What is Infinity?
Bridge to Enter Advanced Mathematics (BEAM)
Union College, Schenectady, New York   July 22, 2017

129. Creating a Database of Belyĭ Maps
Willamette Mathematics Consortium REU Colloquium
Willamette University, Salem, Oregon   July 10, 2017

130. Toroidal Belyĭ Pairs, Toroidal Graphs, and their Monodromy Groups
Geometry, Algebra, Singularities, Combinatorics (GASC) Seminar
Northeastern University, Boston, Massachusetts   February 27, 2017

131. Toroidal Belyĭ Pairs, Toroidal Graphs, and their Monodromy Groups
AMS Special Session on Discrete Structures in Number Theory
Joint Mathematics Meetings, Atlanta, Georgia   January 5, 2017

132. Toroidal Belyĭ Pairs, Toroidal Graphs, and their Monodromy Groups
Blackwell-Tapia Conference
National Institute for Mathematical and Biological Synthesis (NIMBioS),
Knoxville, Tennessee   October 28, 2016

133. Yes, Even You Can Bend It Like Beckham
Meyerhoff Scholars Program National Security Agency (NSA) Seminar Series
University of Maryland at Baltimore County, Baltimore, Maryland   September 27, 2016

134. What is Infinity?
Bridge to Enter Advanced Mathematics (BEAM)
Vassar College, Poughkeepsie, New York   July 23, 2016

135. Metabelian Galois Representations
Upstate Number Theory Conference
University of Rochester, Rochester, New York   April 30, 2016

136. Metabelian Galois Representations
Department of Mathematics Colloquium
Emory University, Atlanta, Georgia   March 31, 2016

137. Indiana Pols Forced to Eat Humble Pi: The Curious History of an Irrational Number
Indiana MAA Spring Sectional Meeting
Franklin College, Franklin, Indiana   March 19, 2016

138. q-series, Partitions, Generating Functions, Modular Forms, and Applications
3rd Lake Michigan Workshop on Combinatorics and Graph Theory
Purdue University, West Lafayette, Indiana   March 5, 2016

139. A Survey of Diophantine Equations
MEC Mathematics Society
Medgar Evers College, Brooklyn, New York   December 7, 2015

140. Yes, Even You Can Bend It Like Beckham
Society for Industrial and Applied Mathematics (SIAM) Chapter Meeting
Howard University, Washington, District of Columbia   October 29, 2015

141. Fuchsian Differential Equations with Prescribed Monodromy:
An Introduction to Solving a Quintic Without Using Radicals
2015 Modern Math Workshop (MMW)
Society for the Advancement of Chicanos and Native Americans in the Sciences (SACNAS)
Washington, District of Columbia   October 28, 2015

142. Yes, Even You Can Bend It Like Beckham
11th Annual Claude B. "Pop" Dansby Lecture
Morehouse College, Atlanta, Georgia   October 22, 2015

143. Belyĭ Maps on Elliptic Curves and Dessin d'Enfants on the Torus
Algebra/Number Theory/Combinatorics Seminar
Pomona College, Claremont, California   October 13, 2015

144. Fuchsian Differential Equations with Prescribed Monodromy:
An Introduction to Solving a Quintic Without Using Radicals
Minorities in Mathematics Speaker Series (MIMSS)
United States Military Academy, West Point, New York   October 5, 2015

145. Belyĭ Maps on Elliptic Curves and Dessin d'Enfants on the Torus
AMS Sectional Meeting AMS Special Session – Meeting #1112
Special Session on Automorphisms of Riemann Surfaces and Related Topics
Loyola University, Chicago, Illinois   October 4, 2015

146. An Introduction to *Dessins d'Enfants*:
The Intersection of Graph Theory, Group Theory, and Differential Geometry
Mathematics Colloquium
Iowa State University, Ames, Iowa   May 7, 2015

147. Applying to Summer Programs, Fellowships, and Graduate School in the Mathematical Sciences
Latinos in the Mathematical Sciences Conference
Institute for Pure and Applied Mathematics, Los Angeles, California April 11, 2015

148. Panel Discussion on The Negotiation Process
Careers in Mathematical Sciences: Workshop for Underrepresented Groups
Institute for Mathematics and its Applications, Minneapolis, Minnesota March 27, 2015

149. Kummer's Conjecture: From Gauss to ENIAC and Beyond
Careers in Mathematical Sciences: Workshop for Underrepresented Groups
Institute for Mathematics and its Applications, Minneapolis, Minnesota March 27, 2015

150. Engaging Students in Extracurricular Math Activities
Indiana Project NExT Panel Discussion
Spring 2015 Meeting of the Indiana Section of the MAA
Taylor University, Upland, Indiana   March 14, 2015

151. Radio Interview for Pi Day
Weekend Indiana with Ray Steele
WIBC 93.1 FM, Indianapolis, Indiana   March 14, 2015

152. Computing with Elliptic Curves over Number Fields
Group, Lie and Number Theory Seminar
University of Michigan, Ann Arbor, Michigan   January 20, 2015

153. From the Diary of a Black Mathematician:
My Journey from South Central to Studying Dessins d'Enfants
Marjorie Lee Browne Colloquium
University of Michigan, Ann Arbor, Michigan   January 19, 2015

154. Arithmetic Progressions on Curves
AMS-AWM Special Session on Recent Developments in Algebraic Number Theory #SS 9A
San Antonio, Texas   January 13, 2015

155. An Introduction to *Dessins d'Enfants*:
The Intersection of Graph Theory, Group Theory, and Differential Geometry
Mathematics Colloquium
Tulane University, New Orleans, Louisiana   November 20, 2014

156. There exist infinitely many rational Diophantine 6-tuples – almost
Conference on Diophantine m-tuples and Related Problems
Purdue University North Central, Westville, Indiana   November 13, 2014

157. On Diophantine n-Tuples (Replacement for Alain Togbe)
Society for the Advancement of Chicanos and Native Americans in the Sciences (SACNAS)
Los Angeles, California   October 18, 2014

158. Kummer's Conjecture: From Gauss to ENIAC and Beyond
Society for the Advancement of Chicanos and Native Americans in the Sciences (SACNAS)
Los Angeles, California   October 16, 2014

159. How to Find Money for Graduate School: A Guide for Mentors
Capstone Institute's NSF Building Connections Project
Howard University, Washington, District of Columbia   October 7, 2014

160. Associating Finite Groups with *Dessins d'Enfants*
Palmetto Number Theory Series XXII
South Carolina State University, Orangeburg, South Carolina   September 7, 2014

161. A Survey of Diophantine Equations
Palmetto Number Theory Series XXII
South Carolina State University, Orangeburg, South Carolina   September 5, 2014

162. An Introduction to *Dessins d'Enfants*:
The Intersection of Graph Theory, Group Theory, and Differential Geometry
Mathematics Colloquium
Lewis & Clark College, Portland, Oregon   July 18, 2014

163. Graduate School Panel
Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI)
Miami University, Oxford, Ohio   July 11, 2014

164. Arithmetic Progressions on Curves
AMS Central Sectional Meeting #1100
Texas Tech University, Lubbock, Texas   April 13, 2014

165. Indiana Pols Forced to Eat Humble Pi: The Curious History of an Irrational Number
Mathematics Colloquium
Wabash College, Crawfordsville, Indiana   April 1, 2014

166. Why Should I Care About Elliptic Curves?
Mathematics Colloquium
Eastern Illinois University, Charleston, Illinois   March 28, 2014

167. *ABC* Triples in Families
AMS Special Session on The Ubiquity of Dynamical Systems
Joint Mathematics Meetings, Baltimore, Maryland   January 16, 2014

168. From Klein's Platonic Solids to Kepler's Archimedean Solids:
Elliptic Curves and *Dessins d'Enfants*
Mathematics Colloquium
College of William and Mary, Williamsburg, Virginia   November 22, 2013

169. From Klein's Platonic Solids to Kepler's Archimedean Solids:
Elliptic Curves and *Dessins d'Enfants*
Teichmüller Seminar
Indiana University, Bloomington, Indiana   October 24, 2013

170. Indiana Pols Forced to Eat Humble Pi: The Curious History of an Irrational Number
Purdue North Central Mathematics Club
Purdue North Central, Westville, Indiana   October 22, 2013

171. Modern Math Workshop Mini-Course 2: A Survey of Diophantine Equations
Society for the Advancement of Chicanos and Native Americans in the Sciences (SACNAS)
San Antonio, Texas   October 2, 2013

172. Graduate School Panel
Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI)
Miami University, Oxford, Ohio   July 8, 2013

173. An Introduction to *Dessins d'Enfants*:
The Intersection of Graph Theory, Group Theory, and Differential Geometry
PI Mathematics Club
Indiana University – Purdue at Fort Wayne, Fort Wayne, Indiana   March 6, 2013

174. From Klein's Platonic Solids to Kepler's Archimedean Solids:
Elliptic Curves and *Dessins d'Enfants*
The Oliver Club Seminar
Cornell University, Ithaca, New York   February 28, 2013

175. From Klein's Platonic Solids to Kepler's Archimedean Solids:
Elliptic Curves and *Dessins d'Enfants*
Automorphic Forms, Representations, and Combinatorics:
A Conference in Honor of Daniel Bump
Stanford University, Palo Alto, California   August 14, 2012

176. An Introduction to *Dessins d'Enfants*:
The Intersection of Graph Theory, Group Theory, and Differential Geometry
REU: Computational Algebraic Geometry, Combinatorics and Number Theory
Clemson University, Clemson, South Carolina   June 26, 2012

177. An Introduction to the Sato-Tate Conjecture
REU: Computational Algebraic Geometry, Combinatorics and Number Theory
Clemson University, Clemson, South Carolina   June 25, 2012

178. Ellipses and Pendulums and Groups, Oh My! From Elliptic Integrals to Elliptic Curves
REU: Computational Algebraic Geometry, Combinatorics and Number Theory
Clemson University, Clemson, South Carolina   June 25, 2012

179. Does There Exist an Elliptic Curve $E/\mathbb{Q}$ with Mordell-Weil Group $Z_2 \times Z_8 \times \mathbb{Z}^4$?
Atkin Memorial Lecture and Workshop Elliptic Curves over $\mathbb{Q}(\sqrt{5})$
University of Illinois at Chicago, Chicago, Illinois   April 28, 2012

180. Riordan Matrix Representations of Euler's Constant γ and Euler's Number e
National Association of Mathematicians (NAM) Faculty Research Conference
Morgan State University, Baltimore, Maryland   April 21, 2012

181. Riordan Matrix Representations of Euler's Constant γ and Euler's Number e
Underrepresented Students in Topology and Algebra Research Symposium (USTARS)
University of Iowa, Iowa City, Iowa   April 14, 2012

182. Arithmetic Progressions on Curves
Algebra/Combinatorics Seminar
Texas A&M University, College Station, Texas   March 22, 2012

183. Ellipses and Pendulums and Groups, Oh My! From Elliptic Integrals to Elliptic Curves
Mathematics Graduate Student Organization
Texas A&M University, College Station, Texas   March 21, 2012

184. An Introduction to *Dessins d'Enfants*:
The Intersection of Graph Theory, Group Theory, and Differential Geometry
Mathematics Club
Texas A&M University, College Station, Texas   March 20, 2012

185. An Introduction to *Dessins d'Enfants*:
The Intersection of Graph Theory, Group Theory, and Differential Geometry
Mathematics Colloquium
Howard University, Washington, District of Columbia   January 13, 2012

186. Themes on the Undergraduate Preparation of Contemporary Mathematics Graduate Students
    NAM Panel Discussion
    Joint Mathematics Meetings, Boston, Massachusetts   January 7, 2012

187. Graduate School Panel
    National Association of Mathematicians (NAM) MATHFest XXI
    Dillard University, New Orleans, Louisiana   November 4, 2011

188. An Introduction to *Dessins d'Enfants*:
    The Intersection of Graph Theory, Group Theory, and Differential Geometry
    SACNAS National Conference
    San Jose, California   October 30, 2011

189. Graduate School Panel
    Young Mathematicians Conference
    Ohio State University, Columbus, Ohio   August 21, 2011

190. Transforming Undergraduates into Researchers:
    Best Practices from an Afrocentric Perspective
    Cultural and Philosophic Underpinnings of Western Science, MAA MathFest
    Lexington, Kentucky   August 6, 2011

191. Graduate School Panel
    Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI)
    Miami University, Oxford, Ohio   July 13, 2011

192. *ABC* Triples in Families
    Underrepresented Students in Topology and Algebra Research Symposium (USTARS)
    University of Iowa, Iowa City, Iowa   April 2, 2011

193. *ABC* Triples in Families
    Purdue Mathematics Club
    Purdue University, West Lafayette, Indiana   February 8, 2011

194. Galois Representations and *L*-Series: A Tour Through Mathematics
    NAM Claytor-Woodard Lecture
    Joint Mathematics Meetings, New Orleans, Louisiana   January 9, 2011

195. Yes, Even You Can Bend It Like Beckham
    Blackwell-Tapia Conference
    Mathematical Biosciences Institute (MBI), Columbus, Ohio   November 5, 2010

196. *ABC* Triples in Families
    Center for Communications Research, La Jolla, California   September 30, 2010

197. Why Should I Care About Elliptic Curves?
    David Blackwell Lecture, Mathematical Association of America (MAA) MathFest
    Portland, Oregon   August 7, 2009

198. Graduate School Panel
    Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI)
    Miami University, Oxford, Ohio   July 1, 2009

199. Four-Covering Maps for Elliptic Curves
    Conference for African-American Researchers in the Mathematical Sciences (CAARMS) 15
    Rice University, Houston, Texas   June 25, 2009

200. Why Should I Care About Elliptic Curves?
    National Security Agency (NSA) 5th Invitational Mathematics Meeting
    Baltimore, Maryland   November 23, 2008

201. Using Parallel Computing to Search for High Rank Elliptic Curves
    Blackwell-Tapia Conference
    SAMSI, Research Triangle Park, North Carolina   November 14, 2008

202. Does There Exist an Elliptic Curve $E/\mathbb{Q}$ with Mordell-Weil Group $Z_2 \times Z_8 \times \mathbb{Z}^4$?
Mathematics Colloquium
Morehouse College, Atlanta, Georgia   November 11, 2008

203. Panelist for "A Tale of Two Cultures"
Promoting Diversity at the Graduate Level in Mathematics: A National Forum
Mathematical Sciences Research Institute (MSRI), Berkeley, California   October 17, 2008

204. Does There Exist an Elliptic Curve $E/\mathbb{Q}$ with Mordell-Weil Group $Z_2 \times Z_8 \times \mathbb{Z}^4$?
Mathematics and Statistics Colloquium
Swarthmore College, Swarthmore, Pennsylvania   September 30, 2008

205. On Finding Large Rational Solutions to $u^3 - d\,v^3 = 1$
Summer Mathematics Institute (SMI) Seminar
Cornell University, Ithaca, New York   June 27, 2008

206. Does There Exist an Elliptic Curve $E/\mathbb{Q}$ with Mordell-Weil Group $Z_2 \times Z_8 \times \mathbb{Z}^4$?
Algebraic Geometry Seminar
University of Bristol, England, United Kingdom   May 14, 2008

207. What Good is Mathematics Anyway?
High School Mathematics Achievement Banquet
University of Evansville, Evansville, Indiana   April 23, 2008

208. Fermat's Last Theorem: The E! True Hollywood Story
Mathematics Colloquium
University of Evansville, Evansville, Indiana   April 23, 2008

209. Does There Exist an Elliptic Curve $E/\mathbb{Q}$ with Mordell-Weil Group $Z_2 \times Z_8 \times \mathbb{Z}^4$?
Number Theory Seminar
University of Illinois, Urbana-Champaign, Illinois   January 15, 2008

210. Introduction to Collaborative Learning
Upward Bound Math and Science Training
Simmons College, Boston, Massachusetts   June 19, 2007

211. There exist infinitely many rational Diophantine 6-tuples – almost
Special Session on Arithmetic Geometry
Joint Meeting of the AMS, New Orleans, Louisiana   January 8, 2007

212. Why Should I Care About Lie Groups?
Mathematics Colloquium
Howard University, Washington, District of Columbia   November 9, 2006

213. Why Should I Care About Lie Groups?
Blackwell-Tapia Conference
Institute for Math and its Applications (IMA), Minneapolis, Minnesota   November 4, 2006

214. A Year in the Life of a Number Theorist
Summer Mathematics Institute (SMI) Seminar
Cornell University, Ithaca, New York   July 7, 2006

215. A Year in the Life of a Number Theorist
Summer Program in Research and Learning (SPIRAL) Seminar
University of Maryland, College Park, Maryland   July 5, 2006

216. Extending the Serre-Faltings Method for $\mathbb{Q}$-Curves
Number Theory Seminar
University of Wisconsin, Madison, Wisconsin   April 11, 2006

217. A Year in the Life of a Number Theorist
Bharucha-Reid Lecture, Nat'l Assoc. of Mathematicians (NAM) Faculty Research Conference
Albany State University, Albany, Georgia   March 11, 2006

218. Prime Numbers, *L*-Series, and Representations of Galois Groups
    REU Seminar
    Clemson University, Clemson, South Carolina   July 8, 2005

219. On the Modularity of Wildly Ramified Galois Representations
    AMS Spring Southeastern Sectional Meeting #1004
    Western Kentucky University, Bowling Green, Kentucky   March 19, 2005

220. On Finding Large Rational Solutions to $u^3 - d\,v^3 = 1$
    Automorphic Forms Workshop
    University of North Texas, Denton, Texas   March 17, 2005

221. On Finding Large Rational Solutions to $u^3 - d\,v^3 = 1$
    Mathematics Colloquium
    SUNY Buffalo, Buffalo, New York   February 24, 2005

222. On the Modularity of Wildly Ramified Galois Representations
    Number Theory Seminar
    University of Illinois, Urbana-Champaign, Illinois   September 28, 2004

223. On the Modularity of Wildly Ramified Galois Representations
    Automorphic Forms Seminar
    Purdue University, West Lafayette, Indiana   September 9, 2004

224. On the Modularity of Wildly Ramified Galois Representations
    Number Theory Seminar
    University of California, Santa Barbara, California   May 25, 2004

225. Congruent Numbers, Rational Triangles, and Elliptic Curves
    Illinois Number Theory Conference
    University of Illinois, Urbana-Champaign, Illinois   May 22, 2004

226. Congruent Numbers, Rational Triangles, and Elliptic Curves
    Mathematics Colloquium
    Center for Communications Research, La Jolla, California   May 18, 2004

227. On the Modularity of Wildly Ramified Galois Representations
    Number Theory Seminar
    University of California, San Diego, California   April 22, 2004

228. On the Modularity of Wildly Ramified Galois Representations
    AMS Spring Western Section Meeting #996
    University of Southern California, Los Angeles, California   April 3, 2004

229. On the Modularity of Wildly Ramified Galois Representations
    Automorphic Forms Workshop
    University of California, Santa Barbara, California   March 21, 2004

230. Application of Mathematics to Chemistry: A History of Quantum Mechanics
    Honors Chemistry Class
    Washington Preparatory High School, Los Angeles, California   March 8, 2004

231. On the Modularity of Wildly Ramified Galois Representations
    Mathematics Colloquium
    Rice University, Houston, Texas   February 16, 2004

232. On the Modularity of Wildly Ramified Galois Representations
    Mathematics Colloquium
    Purdue University, West Lafayette, Indiana   January 27, 2004

233. On the Modularity of Wildly Ramified Galois Representations
    Mathematics Colloquium
    University of Massachusetts, Boston, Massachusetts   November 24, 2003

234. On the Modularity of Wildly Ramified Galois Representations
Number Theory Seminar
University of California, Los Angeles, California   November 10, 2003

235. Congruent Numbers, Rational Triangles, and Elliptic Curves
Mathematics Colloquium
Occidental College, Los Angeles, California   October 23, 2003

236. Congruent Numbers, Rational Triangles, and Elliptic Curves
Louis Stokes Alliance for Minority Participation (LSAMP) Regional Conference
Drexel University, Philadelphia, Pennsylvania   March 29, 2003

237. Congruent Numbers, Rational Triangles, and Elliptic Curves
Mathematics Colloquium
Wesleyan University, Middletown, Connecticut   January 24, 2003

238. Deformations of Galois Representations: An Adventure in Galois Cohomology
Modular Curves Seminar
Harvard University, Cambridge, Massachusetts   January 21, 2003

239. Elliptic Curves and Icosahedral Galois Representations, Part II
Beginning Research in Number Theory Seminar
University of California, Los Angeles, California   December 3, 2002

240. Elliptic Curves and Icosahedral Galois Representations, Part I
Beginning Research in Number Theory Seminar
University of California, Los Angeles, California   November 26, 2002

241. Icosahedral $\mathbb{Q}$-Curve Extensions
Mathematics Colloquium
California State University, Long Beach, California   October 18, 2002

242. Congruent Numbers, Rational Triangles, and Elliptic Curves
Mathematics Colloquium
Claremont Colleges, Claremont, California   September 25, 2002

243. Klein's Galois Theory of the Icosahedral Group via Elliptic Curves
AMS Spring Western Section Meeting #972
Portland State University, Portland, Oregon   June 22, 2002

244. Icosahedral $\mathbb{Q}$-Curve Extensions
Number Theory Seminar
University of California, Irvine, California   April 2, 2002

245. Icosahedral $\mathbb{Q}$-Curve Extensions
Number Theory Seminar
University of California, Santa Barbara, California   March 15, 2002

246. Icosahedral $\mathbb{Q}$-Curve Extensions
Number Theory Seminar
California Institute of Technology, Pasadena, California   February 14, 2002

247. Icosahedral $\mathbb{Q}$-Curve Extensions
Number Theory Seminar
Boston University, Boston, Massachusetts   December 10, 2001

248. Galois Representations of $PSL(2,7)$
Number Theory Seminar
University of California, San Diego, California   December 7, 2000

249. Galois Representations of $PSL(2,7)$
Number Theory Seminar
Stanford University, Stanford, California   November 28, 2000

250. An Icosahedral Representation Attached at a $\mathbb{Q}$-Curve
Number Theory Seminar
University of California, Berkeley, California   November 17, 2000

251. Moving in Academic Circles Outside the University
Minority Alumni Lecture Series
Stanford University, Stanford, California   October 30, 2000

252. Introduction to Fourier Analysis
National l Council for Minorities in Engineering (NACME) Forum
Convention Center, Long Beach, California   October 28, 2000

253. An Icosahedral Representation Attached at a $\mathbb{Q}$-Curve
Automorphic Forms Seminar
Purdue University, West Lafayette, Indiana   October 12, 2000

254. On the Multiplicative Properties of the Sums of Squares
Mathematics Colloquium
Vanderbilt University, Nashville, Tennessee   July 27, 2000

255. An Icosahedral Representation Attached at a $\mathbb{Q}$-Curve
Conference for African-American Researchers in the Mathematical Sciences (CAARMS) 6
Morgan State University, Baltimore, Maryland   June 30, 2000

256. An Icosahedral Representation Attached at a $\mathbb{Q}$-Curve
Number Theory Seminar
Harvard University, Cambridge, Massachusetts   April 26, 2000

257. An Icosahedral Representation Attached at a $\mathbb{Q}$-Curve
Granville-Brown-Haynes Session of Presentations by Recent Doctorial Recipients in the Mathematical Sciences
Joint Mathematics Meetings, Washington, District of Columbia   January 21, 2000

258. An Icosahedral Representation Attached at a $\mathbb{Q}$-Curve
Mathematics Seminar
Brigham Young University, Salt Lake City, Utah   December 2, 1999

259. On the Distribution of Fractional Parts
National Physical Science Consortium (NPSC) Conference
NPSC, La Jolla, California   May 14, 1998

LOCAL TALKS

1. Panelist for *Liberal Arts and Grand Challenges*
2023 Pomona College Trustee Faculty Retreat
Rancho Bernardo Inn Golf Course, San Diego, California   March 3-5, 2023

2. How I Spent My Summer Vacation: Excursions in Monodromy of Belyĭ Lattès Maps
Intensive Summer Experience Symposium / Fall Faculty Lecture Series
Pomona College, Claremont, California   September 21, 2022

3. Monodromy Groups of Belyĭ Lattès Maps
Algebra / Number Theory / Combinatorics Seminar
Pomona College, Claremont, California   September 6, 2022

4. The Black Mathematician Chronicles: Our Quest to Update the MAD Pages
Alumni Weekend and Reunion "Ideas@Pomona"
Pomona College, Claremont, California   April 29, 2022

5. The Black Mathematician Chronicles: Our Quest to Update the MAD Pages
Fall Faculty Lecture Series
Pomona College, Claremont, California   November 17, 2021

6. Pomona Research in Mathematics Experience (PRiME): Reflections on a Research Learning Community
Pomona College Family Weekend
Pomona College, Claremont, California   October 15, 2021

7. Critical Points of Toroidal Belyǐ Maps
Algebra / Number Theory / Combinatorics Seminar
Pomona College, Claremont, California   October 5, 2021

8. Panel on "Diversifying the Classroom"
In Trust for Humankind: Activism & Diversity, Equity and Inclusion at Pomona
Pomona College, Claremont, California   October 3, 2020

9. NSF GRFP Information Session
Pomona College, Claremont, California   September 24, 2020

10. The Black Mathematician Chronicles: Our Quest to Update the MAD Pages
Claremont History and Philosophy of Mathematics Seminar
Pitzer College, Claremont, California   September 18, 2020

11. Indiana Pols Forced to Eat Humble Pi: The Curious History of an Irrational Number
Mathematics Colloquium
Harvey Mudd College, Claremont, California   September 2, 2020

12. An Introduction to the Sato-Tate Conjecture
Algebra / Number Theory / Combinatorics Seminar
Pomona College, Claremont, California   October 2, 2018

13. Classical Modular Curves to Quaternion Algebras, Part II
Algebraic Geometry Seminar
Purdue University, West Lafayette, Indiana   November 8, 2017

14. Classical Modular Curves to Quaternion Algebras, Part I
Algebraic Geometry Seminar
Purdue University, West Lafayette, Indiana   November 1, 2017

15. Class Field Theory via the Ideal and Idèle Class Groups
Algebraic Geometry Seminar
Purdue University, West Lafayette, Indiana   September 20, 2017

16. So You Want to Break Codes: Careers in Government for Mathematicians
MA 10800: Mathematics as a Profession
Purdue University, West Lafayette, Indiana   September 12, 2017

17. An Introduction to Galois Representations
Bridge to Research Seminar
Purdue University, West Lafayette, Indiana   November 18, 2016

18. A Survey of Diophantine Equations
Bridge to Research Seminar
Purdue University, West Lafayette, Indiana   October 31, 2016

19. Tips for Success is Graduate School: Things to Do and Mistakes to Avoid
Graduate School eMentoring Program
Purdue University, West Lafayette, Indiana   October 6, 2016

20. So You Want to Break Codes: Careers in Government for Mathematicians
MA 10800: Mathematics as a Profession
Purdue University, West Lafayette, Indiana   October 6, 2016

21. NSF GRFP Writing Studio
Mathematics/Statistics NSF GRFP Seminar
Purdue University, West Lafayette, Indiana   September 22, 2016

22. NSF GRFP Information Session
    Mathematics/Statistics NSF GRFP Seminar
    Purdue University, West Lafayette, Indiana   September 8, 2016

23. Introduction to Representation Theory
    Number Theory Seminar
    Purdue University, West Lafayette, Indiana   September 1, 2016

24. Generating Functions, Partitions, and q-series: An Introduction to Classical Modular Forms
    Number Theory Seminar
    Purdue University, West Lafayette, Indiana   June 28, 2016

25. Outreach in Mathematics at Purdue University: Math Club and Summer Activities
    Dean's Visit to the Department of Mathematics
    Purdue University, West Lafayette, Indiana   March 24, 2016

26. Transforming Undergraduates into Researchers:
    Best Practices from an Afrocentric Perspective
    Purdue SACNAS Chapter "Let's Connect!" Series
    Purdue University, West Lafayette, Indiana   November 4, 2015

27. NSF GRFP Writing Studio
    Mathematics/Statistics NSF GRFP Seminar
    Purdue University, West Lafayette, Indiana   October 15, 2015

28. NSF GRFP Information Session
    Mathematics/Statistics NSF GRFP Seminar
    Purdue University, West Lafayette, Indiana   October 1, 2015

29. So You Want to Break Codes: Careers in Government for Mathematicians
    MA 10800: Mathematics as a Profession
    Purdue University, West Lafayette, Indiana   October 1, 2015

30. Classical Statement of Riemann-Roch with Applications to Low Genus Curves
    Riemann-Roch Seminar
    Purdue University, West Lafayette, Indiana   July 10, 2015

31. Symbolic Calculator Tutorial
    Purdue Mathematics Club
    Purdue University, West Lafayette, Indiana   February 19, 2015

32. NSF GRFP Mathematical Sciences Prep Workshop
    Purdue University, West Lafayette, Indiana   October 21, 2014

33. So You Want to Break Codes: Careers in Government for Mathematicians
    MA 10800: Mathematics as a Profession
    Purdue University, West Lafayette, Indiana   October 2, 2014

34. A Survey of Diophantine Equations
    Purdue Mathematics Club
    Purdue University, West Lafayette, Indiana   September 18, 2014

35. An Introduction to Composition of Quadratic Forms and Quadratic Reciprocity
    Number Theory Seminar
    Purdue University, West Lafayette, Indiana   September 18, 2014

36. Ellipses and Pendulums and Groups, Oh My! From Elliptic Integrals to Elliptic Curves
    PRiME Virtual Seminar
    Purdue University, West Lafayette, Indiana   August 1, 2014

37. Yes, Even You Can Bend It Like Beckham
    PRiME Virtual Seminar
    Purdue University, West Lafayette, Indiana   July 25, 2014

38. An Introduction to *Dessins d'Enfants*:
    The Intersection of Graph Theory, Group Theory, and Differential Geometry
    PRiME Virtual Seminar
    Purdue University, West Lafayette, Indiana   June 27, 2014

39. Outreach in Mathematics at Purdue University: Math Club and Summer Activities
    Dean's Visit to the Department of Mathematics
    Purdue University, West Lafayette, Indiana   February 26, 2014

40. Ellipses and Pendulums and Groups, Oh My!: From Elliptic Integrals to Elliptic Curves
    PHYS 235: Careers in Physics
    Purdue University, West Lafayette, Indiana   February 18, 2014

41. Computing with Elliptic Curves over Number Fields
    Automorphic Forms Seminar
    Purdue University, West Lafayette, Indiana   February 6, 2014

42. Indiana Pols Forced to Eat Humble Pi: The Curious History of an Irrational Number
    Purdue Mathematics Club
    Purdue University, West Lafayette, Indiana   November 7, 2013

43. Preparing Job Applications and Grant Proposals
    Association for Women in Mathematics (AWM) Purdue Chapter Workshop
    Purdue University, West Lafayette, Indiana   October 16, 2013

44. So You Want to Break Codes: Careers in Government for Mathematicians
    MA 10800: Mathematics as a Profession
    Purdue University, West Lafayette, Indiana   September 17, 2013

45. Elliptic Curves and Equidistributions: From Gauss and Kummer to Sato and Tate
    Bridge to Research Seminar
    Purdue University, West Lafayette, Indiana   September 9, 2013

46. The Weil Pairing on Elliptic Curves, Part II
    Number Theory Seminar
    Purdue University, West Lafayette, Indiana   September 5, 2013

47. The Weil Pairing on Elliptic Curves, Part I
    Number Theory Seminar
    Purdue University, West Lafayette, Indiana   August 29, 2013

48. Why Should I Care About Lie Groups?
    Basic Notions Seminar
    Purdue University, West Lafayette, Indiana   April 12, 2013

49. Ellipses and Pendulums and Groups, Oh My!: From Elliptic Integrals to Elliptic Curves
    Graduate Recruitment Weekend
    Purdue University, West Lafayette, Indiana   March 1, 2013

50. Ranks of Elliptic Curves via Class Groups of Number Fields
    Number Theory Seminar
    Purdue University, West Lafayette, Indiana   November 16, 2012

51. So You Want to Break Codes: Careers in Government for Mathematicians
    MA 10800: Mathematics as a Profession
    Purdue University, West Lafayette, Indiana   October 31, 2012

52. LaTeX Demystified: Typesetting Mathematics as a Professional
    Association for Women in Mathematics (AWM) Purdue Chapter Workshop
    Purdue University, West Lafayette, Indiana   October 16, 2012

53. Indiana Pols Forced to Eat Humble Pi: The Curious History of an Irrational Number
    Basic Notions Seminar
    Purdue University, West Lafayette, Indiana   September 21, 2012

54. From Klein's Platonic Solids to Kepler's Archimedean Solids:
    Elliptic Curves and *Dessins d'Enfants*, Part II
    Number Theory Seminar
    Purdue University, West Lafayette, Indiana   September 7, 2012

55. From Klein's Platonic Solids to Kepler's Archimedean Solids:
    Elliptic Curves and *Dessins d'Enfants*, Part I
    Number Theory Seminar
    Purdue University, West Lafayette, Indiana   August 31, 2012

56. *ABC* Triples in Families
    Bridge to Research Seminar
    Purdue University, West Lafayette, Indiana   August 20, 2012

57. The Control Theorem, Part III
    Number Theory Seminar
    Purdue University, West Lafayette, Indiana   October 6, 2011

58. The Control Theorem, Part II
    Number Theory Seminar
    Purdue University, West Lafayette, Indiana   September 29, 2011

59. Ellipses and Pendulums and Groups, Oh My!: From Elliptic Integrals to Elliptic Curves
    Bridge to Research Seminar
    Purdue University, West Lafayette, Indiana   September 26, 2011

60. The Control Theorem, Part I
    Number Theory Seminar
    Purdue University, West Lafayette, Indiana   September 22, 2011

61. So You Want to Break Codes: Careers in Government for Mathematicians
    MA 10800: Mathematics as a Profession
    Purdue University, West Lafayette, Indiana   September 22, 2011

62. An Introduction to Iwasawa Theory for Elliptic Curves, Part II
    Number Theory Seminar
    Purdue University, West Lafayette, Indiana   September 1, 2011

63. An Introduction to Iwasawa Theory for Elliptic Curves, Part I
    Number Theory Seminar
    Purdue University, West Lafayette, Indiana   August 25, 2011

64. An Introduction to *Dessins d'Enfants*:
    The Intersection of Graph Theory, Group Theory, and Differential Geometry
    Purdue Mathematics Club
    Purdue University, West Lafayette, Indiana   September 8, 2011

65. Representations of $\mathfrak{S}_3 \simeq GL_2(\mathbb{F}_2)$
    Number Theory Seminar
    Purdue University, West Lafayette, Indiana   November 30, 2010

66. So You Want to Break Codes: Careers in Government for Mathematicians
    MA 10800: Mathematics as a Profession
    Purdue University, West Lafayette, Indiana   October 28, 2010

67. Fundamental Characters of Level n, Part II
    Number Theory Seminar
    Purdue University, West Lafayette, Indiana   October 26, 2010

68. Fundamental Characters of Level n, Part I
    Number Theory Seminar
    Purdue University, West Lafayette, Indiana   October 19, 2010

69. Galois Groups of Local Fields
Number Theory Seminar
Purdue University, West Lafayette, Indiana   May 3, 2010

70. Orders in Number Fields, Part II
Number Theory Seminar
Purdue University, West Lafayette, Indiana   April 22, 2010

71. Orders in Number Fields, Part I
Number Theory Seminar
Purdue University, West Lafayette, Indiana   April 15, 2010

72. Computing with Elliptic Curves over Number Fields
Joint Logic / Number Theory Seminar
Purdue University, West Lafayette, Indiana   April 15, 2010

73. Introduction to Ample Line Bundles
Number Theory Seminar
Purdue University, West Lafayette, Indiana   March 2, 2010

74. Manipulating Algebraic Integers Using SAGE: A Tutorial, Part II
Number Theory Seminar
Purdue University, West Lafayette, Indiana   February 4, 2010

75. Elliptic Curves and Equidistributions: From Gauss and Kummer to Sato and Tate
Purdue Mathematics Club
Purdue University, West Lafayette, Indiana   January 28, 2010

76. Manipulating Algebraic Integers Using SAGE: A Tutorial, Part I
Number Theory Seminar
Purdue University, West Lafayette, Indiana   January 28, 2010

77. Schemes: The Gluing Construction
Number Theory Seminar
Purdue University, West Lafayette, Indiana   December 3, 2009

78. An Introduction to the Sato-Tate Conjecture, Part II
Automorphic Forms Seminar
Purdue University, West Lafayette, Indiana   December 3, 2009

79. An Introduction to the Sato-Tate Conjecture, Part I
Automorphic Forms Seminar
Purdue University, West Lafayette, Indiana   November 19, 2009

80. Why Should I Care About Elliptic Curves?
Purdue Mathematics Club
Purdue University, West Lafayette, Indiana   April 16, 2009

81. The Comet thro' the long Elliptic Curve: Why I Love Curves of Genus 1
Bridge to Research Seminar
Purdue University, West Lafayette, Indiana   February 9, 2009

82. Graduate School Panel
Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI)
Miami University, Oxford, Ohio   July 2, 2008

83. Distributions of 2-Selmer Ranks for Elliptic Curves, Part III
Automorphic Forms Seminar
Purdue University, West Lafayette, Indiana   January 31, 2008

84. Distributions of 2-Selmer Ranks for Elliptic Curves, Part II
Automorphic Forms Seminar
Purdue University, West Lafayette, Indiana   January 24, 2008

85. Distributions of 2-Selmer Ranks for Elliptic Curves, Part I
Automorphic Forms Seminar
Purdue University, West Lafayette, Indiana   January 17, 2008

86. Graduate School Panel
Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI)
Miami University, Oxford, Ohio   July 11, 2007

87. A Year in the Life of a Number Theorist
MA 108: Mathematics as a Profession
Purdue University, West Lafayette, Indiana   November 2, 2006

88. Ellipses and Pendulums and Groups, Oh My!: From Elliptic Integrals to Elliptic Curves
SCI 110: Honors Science
Purdue University, West Lafayette, Indiana   October 30, 2006

89. Does There Exist an Elliptic Curve $E/\mathbb{Q}$ with Mordell-Weil Group $Z_2 \times Z_8 \times \mathbb{Z}^4$?
Automorphic Forms Seminar
Purdue University, West Lafayette, Indiana   September 28, 2006

90. From Diophantine Equations to Representations of Galois Groups
Bridge to Research Seminar
Purdue University, West Lafayette, Indiana   April 24, 2006

91. Towards Artin's Conjecture for Three-Dimensional Galois Representations, Part II
Automorphic Forms Seminar
Purdue University, West Lafayette, Indiana   November 3, 2005

92. Towards Artin's Conjecture for Three-Dimensional Galois Representations, Part I
Automorphic Forms Seminar
Purdue University, West Lafayette, Indiana   October 26, 2005

93. Prime Numbers, L-Series, and Representations of Galois Groups
Summer Undergraduate Mathematical Sciences Institute (SUMSRI) Seminar
Miami University; Oxford, Ohio   June 16, 2005

94. From Moduli Spaces to Modular Curves, Part II
Working Algebraic Geometry Seminar
Purdue University, West Lafayette, Indiana   September 29, 2004

95. From Moduli Spaces to Modular Curves, Part I
Working Algebraic Geometry Seminar
Purdue University, West Lafayette, Indiana   September 22, 2004

96. Congruent Numbers, Rational Triangles, and Elliptic Curves
Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI) Seminar
Miami University, Oxford, Ohio   June 10, 2004

97. On the Modularity of Wildly Ramified Galois Representations
Number Theory Seminar
California Institute of Technology, Pasadena, California   October 30, 2003

98. Extending the Serre-Faltings Method for $\mathbb{Q}$-Curves
Number Theory Seminar
California Institute of Technology, Pasadena, California   March 6, 2003

99. Where Have the Black Students Gone?
Office of Minority Student Education
California Institute of Technology, Pasadena, California   February 26, 2003

100. Are the Students Learning?
Teaching Assistant Preparation Keynote Address
California Institute of Technology, Pasadena, California   September 26, 2002

101. Icosahedral $\mathbb{Q}$-Curve Extensions
    Number Theory Seminar
    Harvard University, Cambridge, Massachusetts   December 5, 2001

102. Finding a Modular Form Associated to a $PSL(2,7)$-Extension
    Modular Curves Seminar
    Harvard University, Cambridge, Massachusetts   October 29, 2001

103. Galois Representations of $PSL(2,7)$
    Number Theory Seminar
    Max Planck Institute, Bonn, Germany   May 16, 2001

104. An Icosahedral Representation Attached at a $\mathbb{Q}$-Curve
    Number Theory Seminar
    Max Planck Institute, Bonn, Germany   January 24, 2001

105. Galois Representations of $PSL(2,7)$
    Number Theory Seminar
    Mathematical Sciences Research Institute (MSRI), Berkeley, California   November 27, 2000

106. Elliptic Curves and Polynomials of Degree 5
    Postdoctoral Fellows Seminar
    Mathematical Sciences Research Institute (MSRI), Berkeley, California   November 3, 2000

107. An Icosahedral Representation Attached at a $\mathbb{Q}$-Curve
    Automorphic Forms Seminar
    Institute for Advanced Study (IAS), Princeton, New Jersey   April 4, 2000

108. An Icosahedral Representation Attached at a $\mathbb{Q}$-Curve
    New Postdocs Seminar
    Institute for Advanced Study (IAS), Princeton, New Jersey   September 23, 1999

ACADEMIC
EXPERIENCE

Pomona College, Claremont, California USA
PI, PRiME   **June 2022 − July 2022**

I designed and advised a residential 8-week research program for 15 undergraduate students, 5
graduate students, and 5 faculty as part of an NSF Workforce Infrastructure (DMS-2113782).
`http://research.pomona.edu/prime`

Pomona College, Claremont, California USA
PI, PRiME   **June 2021 − July 2021**

I designed and advised a virtual 8-week research program for 14 undergraduate students as part
of an NSA REU Site (H98230-21-1-0015). The program broke the students into three research
groups, and focused on branched covers of curves.
`https://pages.pomona.edu/~ehga2017/prime/previousresearch.html#2021`

MSRI, Berkeley, California, USA
Research Leader, MSRI-UP   **July 2020**

Along with Duane Cooper, I led a 6-week virtual summer research program for 18 undergraduates.
Students were broken into six research groups, broadly working on branched covers of curves.
`https://www.msri.org/msri_ups/949`

Pomona College, Claremont, California USA
PI, PRiME   **June 2020 − July 2020**

I designed and advised a virtual 6-week research program for 8 undergraduate students as part
of an NSF REU Site (DMS-1850909). The program focused on a updating a database of African
Americans in the mathematical sciences. 7 students were from outside of Pomona College and 1
was from Pomona College.

MSRI, Berkeley, California, USA
Lead Program Director, ADJOINT **July 2019**

I designed a 2-week research program for several faculty as part of "African Diaspora Joint Mathematics Research Groups (ADJOINT)" at the Mathematical Sciences Research Institute (MSRI). Caleb Ashley (University of Michigan at Ann Arbor), Naiomi Cameron (Lewis & Clark College), and Emille Davie Lawrence (University of San Francisco) worked on branched covers $\beta : X \to \mathbb{P}^1(\mathbb{C})$ of the Riemann sphere, studying Fuchsian Differential equations in order to explicitly compute sections $s : \mathbb{P}^1(\mathbb{C}) \to X$ of such covers.
`https://www.msri.org/programs/349`

Pomona College, Claremont, California USA
PI, PRiME **June 2019 − July 2019**

Along with Alex Barrios, I designed and advised a 8-week research program for 12 undergraduate students as part of an NSF REU Site (DMS-1850909). The program focused on a greater understanding of Dessins d'Enfants on the torus by (1) computing examples of Belyĭ maps $\beta : X \to \mathbb{P}^1(\mathbb{C})$ for the complex points $X = E(\mathbb{C})$ on an elliptic curve E, and (2) computing the monodromy groups of graphs which can be embedded on the torus without crossings. 10 students were from outside of Pomona College and 2 were from Pomona College.
`https://pages.pomona.edu/~ehga2017/prime/previousresearch.html#2019`

Purdue University, West Lafayette, Indiana USA
co-PI, PRiME **June 2017 − July 2017**

Along with Jon Peterson, I designed and advised a 8-week research program for 10 undergraduate students as part of an NSF REU Site (DMS-1560394). The program focused on a greater understanding of Dessins d'Enfants on the torus by (1) computing examples of Belyĭ maps $\beta : X \to \mathbb{P}^1(\mathbb{C})$ for the complex points $X = E(\mathbb{C})$ on an elliptic curve E, and (2) computing the monodromy groups of graphs which can be embedded on the torus without crossings.
`https://pages.pomona.edu/~ehga2017/prime/previousresearch.html#2017`

Purdue University, West Lafayette, Indiana USA
co-PI, PRiME **June 2016 − August 2016**

Along with Jon Peterson, I designed and advised a 8-week research program for 10 undergraduate students as part of an NSF REU Site (DMS-1560394). The program focused on a greater understanding of Dessins d'Enfants on the torus by (1) computing examples of Belyĭ maps $\beta : X \to \mathbb{P}^1(\mathbb{C})$ for the complex points $X = E(\mathbb{C})$ on an elliptic curve E, and (2) computing the monodromy groups of graphs which can be embedded on the torus without crossings.
`https://pages.pomona.edu/~ehga2017/prime/previousresearch.html#2016`

Purdue University, West Lafayette, Indiana USA
Director, PRiME **June 2015 − August 2015**

Designed and advised a 8-week research program for 7 undergraduate students. The program focused on a greater understanding of Dessins d'Enfants on the torus by (1) computing examples of Belyĭ maps $\beta : X \to \mathbb{P}^1(\mathbb{C})$ for the complex points $X = E(\mathbb{C})$ on an elliptic curve E, and (2) drawing the inverse image $\beta^{-1}\big([0,1]\big) \hookrightarrow \mathbb{R}^3$ of the unit interval, viewed as a bipartite graph without edge crossings, on the torus in 3-dimensions via elliptic integrals.
`https://pages.pomona.edu/~ehga2017/prime/previousresearch.html#2015`

American Institute of Mathematics / Institute for Computational and Experimental Research in Mathematics, Providence, Rhode Island USA
Workshop Leader, REUF **June 2015**

Directed a workshop for 5 faculty to conduct research at their home institutions. The Research Experiences for Undergraduate Faculty (REUF) is designed to introduce undergraduate faculty to research opportunities in several fields of mathematics that will equip them with the tools to mentor students in undergraduate research in mathematics.

http://aimath.org/ARCC/workshops/reuf7.html

Purdue University, West Lafayette, Indiana USA
Director, PRiME   **June 2014 − August 2014**

Designed and advised a 8-week research program for 4 undergraduate students. The program focused on a greater understanding of Dessins d'Enfants by (1) determining those planar graphs which can be realized as Dessins d'Enfants of suitable yet explicit Belyĭ maps $\beta : \mathbb{P}^1(\mathbb{C}) \to \mathbb{P}^1(\mathbb{C})$; and (2) determining those subgroups of $\mathrm{Aut}(\mathbb{P}^1(\mathbb{C}))$ which can be realized as automorphisms of suitable yet explicit Belyĭ maps.

https://pages.pomona.edu/~ehga2017/prime/previousresearch.html#2014

American Institute of Mathematics, Palo Alto, California USA
Structured Quartet Research Ensemble (SQuaRE)   **March 17 − 21, 2014**

As a follow-up to the 2012 REUF project, I lead a week-long research group consisting of 7 young career faculty. The project focused on visualizing Dessins d'Enfants by (1) exhibiting examples of planar graphs which can be generated as Dessins d'Enfants using obvious symmetries from well-known Belyĭ maps $\beta : \mathbb{P}^1(\mathbb{C}) \to \mathbb{P}^1(\mathbb{C})$ from the given valencies of a planar graph; and (2) writing code in Sage to explicitlt construct Belyĭ maps

http://www.aimath.org/research/squares.html

Purdue University, West Lafayette, Indiana USA
Director, PRiME   **June 2013 − August 2013**

Designed and advised a 8-week research program for 8 undergraduate students. The program focused on a greater understanding of Dessins d'Enfants by (1) determining those planar graphs which can be realized as Dessins d'Enfants of suitable yet explicit Belyĭ maps $\beta : \mathbb{P}^1(\mathbb{C}) \to \mathbb{P}^1(\mathbb{C})$; and (2) determining those subgroups of $\mathrm{Aut}(\mathbb{P}^1(\mathbb{C}))$ which can be realized as automorphisms of suitable yet explicit Belyĭ maps.

https://pages.pomona.edu/~ehga2017/prime/previousresearch.html#2013

American Institute of Mathematics / Institute for Computational and Experimental Research in Mathematics, Providence, Rhode Island USA
Workshop Leader, REUF   **June 2012**

Directed a workshop for 5 faculty to conduct research at their home institutions. The Research Experiences for Undergraduate Faculty (REUF) is designed to introduce undergraduate faculty to research opportunities in several fields of mathematics that will equip them with the tools to mentor students in undergraduate research in mathematics.

http://www.aimath.org/ARCC/workshops/reuf4.html

Purdue University, West Lafayette, Indiana USA
Research Mentor, PRiME   **June 2012 − August 2012**

Designed and advised a 8-week research program for 5 undergraduate students. The program focused on determining when there are four squares or three cubes in an arithmetic progression over $\mathbb{Q}(\sqrt{D})$ by determining the ranks of quadratic twists of the elliptic curves $y^2 = x^3 + 5\,x^2 + 4\,x$ and $y^2 = x^3 - 27$.

http://www.math.purdue.edu/~egoins/prime/PRiME%202012.html
https://pages.pomona.edu/~ehga2017/prime/previousresearch.html#2012

Mathematical Sciences Research Institute, Berkeley, California USA
Academic Director, MSRI-UP **June 2010 − July 2010**

Designed and advised a 6-week research program for 18 undergraduate students. The program focused six projects: "Searching for Elliptic Curves with Rank 9", "Squares in Arithmetic Progressions", "*ABC*-Triples in Families", "Rational Distance Sets on Conic Sections", "Encrypting Text Messages via Elliptic Curve Cryptography", and "Decrypting Text Messages via Elliptic Curve Factorization."
http://www.msri.org/web/msri/static-pages/-/node/137

Miami University, Oxford, Ohio USA
Research Mentor, SUMSRI **June 2008 − July 2008**

Designed and advised a 7-week research program for 6 undergraduate students. The program focused on finding elliptic curves of large rank having torsion subgroup $Z_2 \times Z_8$ by using a large-scale computing array.
http://calico.mth.miamioh.edu/sumsri/sumj/2008/NT08.pdf
http://www.math.purdue.edu/~egoins/notes/4-Covering_Maps_on_Elliptic_Curves_with_Torsion_Subgroup_Z2xZ8.pdf

Research Mentor, SUMSRI **June 2007 − July 2007**

Designed and advised a 7-week research program for 4 undergraduate students. The program focused on finding elliptic curves of large rank having torsion subgroup $Z_2 \times Z_8$ by using a large-scale computing array.
http://calico.mth.miamioh.edu/sumsri/sumj/2007/2007/SelmerStats07.pdf
http://www.math.purdue.edu/~egoins/notes/A_Statistical_Analysis_of_2-Selmer_Groups_for_Elliptic_Curves_with_Torsion_Subgroup_Z2xZ8.pdf

Research Mentor, SUMSRI **June 2006 − July 2006**

Designed and advised a 7-week research program for 5 undergraduate students. The program focused on finding elliptic curves of large rank having torsion subgroup $Z_2 \times Z_8$ by using a large-scale computing array.
http://calico.mth.miamioh.edu/sumsri/sumj/2006/NTpaper06.pdf
http://www.math.purdue.edu/~egoins/notes/Elliptic_Curves_with_Torsion_Subgroup_Z2xZ8.pdf

Research Mentor, SUMSRI **June 2005 − July 2005**

Designed and advised a 7-week research program for 5 undergraduate students. The program focused on finding elliptic curves of large rank having torsion subgroup $Z_2 \times Z_4$ by modifying an algorithm due to Nick Rogers.
http://calico.mth.miamioh.edu/sumsri/sumj/2005/NTpaper.pdf
http://www.math.purdue.edu/~egoins/notes/In_Search_of_an_8.pdf

Research Mentor, SUMSRI **June 2004 − July 2004**

Designed and advised a 7-week research program for 5 undergraduate students. The program focused on finding large rational points on Thue equations by using continued fractions of elliptic integrals.
http://calico.mth.miamioh.edu/sumsri/sumj/2004/NumberTheory.pdf
http://www.math.purdue.edu/~egoins/notes/On_Large_Rational_Solutions_of_Cubic_Thue_Equations.pdf
http://www.rose-hulman.edu/mathjournal/archives/2006/vol7-n2/paper6/v7n2-6pd.pdf

California Institute of Technology, Pasadena, California USA

Director, Freshman Summer Institute **August 2007**

Directed a 4-week program for 8 students entering their first year of college. Responsibilities included coordinating a staff of ten members, assisting two counselors, organizing four field trips, overseeing daily activities, and writing final program report in order to renew funding.

Mathematics Instructor, Freshman Summer Institute **August 2005**

Lectured during a 4-week program for 15 students entering their first year of college. Responsibilities included designing the course content, giving five lectures, creating worksheets, creating daily homework assignments, and leading a staff of two workshop leaders. Also gave a series of short lectures on current research in the mathematical sciences.

Mathematics Instructor, Freshman Summer Institute **August 2004**

Lectured during a 4-week program for 15 students entering their first year of college. Responsibilities included designing the course content, giving five lectures, creating worksheets, creating daily homework assignments, and leading a staff of two workshop leaders.

Physics Instructor, Freshman Summer Institute **August 2003**

Lectured during a 4-week program for 11 students entering their first year of college. Responsibilities included designing the course content, giving five lectures, creating worksheets, creating daily homework assignments, and leading a staff of two workshop leaders.

Lecturer, Sophomore Mathematics Workshop **August 2003**

Organized and taught a three-day residential program for 8 students entering their second year of college. Responsibilities included organizing activities for the weekend, securing a location, and lecturing on differential equations, probability theory, and quantum mechanics.

Mathematics Instructor, Freshman Summer Institute **August 2002**

Lectured during a 5-day program for 24 students entering their first year of college. Responsibilities included designing the course content, giving daily lectures, creating daily worksheets, creating daily homework assignments, and leading a staff of three workshop leaders.

Lecturer, Sophomore Mathematics Workshop **September 2001**

Mathematics / Physics Workshop Leader, Freshman Summer Institute **August 2001**

Ran daily workshops in differential calculus and Newtonian mechanics during a ten-day program for 20 students entering their first year of college.

Mathematics Instructor, Freshman Summer Institute **August 2000**

Taught a five-day course on logic and mathematical proofs for 15 students entering their first year of college.

Mathematics Instructor, Bridge Program **August 1994 − September 1994**

Mathematics Instructor, Bridge Program **August 1993 − September 1993**

Art, Research, and Curriculum Associates, Whittier, California USA
Leader, GED Mathematics Workshop **September 2002**

Presented a one-day workshop for 10 bilingual tutors preparing adults to take the General Education Development (GED) test.

Leader, GED Mathematics Workshop **April 2002**

National Action Council for Minorities in Engineering, Nashville, Tennessee USA
Workshop Leader / Physics Instructor, Summer Immersion Program **July 2000**

Taught in a twelve-day residential program for 86 students entering their first year of college. Responsibilities included leading workshops in both math and physics to assist with homework assignments, presenting supplemental material in both math and physics, creating worksheets and solution manuals for the discrete math course, designing the curriculum for the physics course, and giving physics lectures.

Eastside College Preparatory High School, East Palo Alto, California USA
Pre-Calculus Teacher / Calculus Teacher **August 1998 − June 1999**

Stanford University, Palo Alto, California USA
Director, Carlmont-Stanford Tutoring Program **January 1996 − June 1998**

National Security Agency (NSA), Ft. Meade, Maryland USA
Leader, Analytic Number Theory Problem Solving Group **June 1996 − August 1996**

Lectured five hours a week for an introductory seminar on number theory.

COURSES TAUGHT **Pomona College**, Claremont, California USA

MATH060 PO: Linear Algebra	January 2023 − May 2023
	January 2021 − May 2021
	August 2020 − December 2020
	August 2019 − December 2019
	January 2019 − May 2019
	August 2018 − December 2018
MATH067 PO: Vector Calculus	August 2022 − December 2022
	January 2022 − May 2022
	August 2021 − December 2021
MATH101 PO: Introduction to Analysis	January 2022 − May 2022
	January 2020 − May 2020
MATH102 PO: Differential Equations and Modeling	January 2023 − May 2023
	August 2022 − December 2022
	January 2021 − May 2021
MATH131 PO: Principles of Real Analysis I	August 2020 − December 2020
MATH171 PO: Abstract Algebra I: Groups and Rings	January 2019 − May 2019
MATH172 PO: Abstract Algebra II: Galois Theory	August 2021 − December 2021
	August 2019 − December 2019
MATH176 PO: Algebraic Geometry	January 2020 − May 2020

Purdue University, West Lafayette, Indiana USA

MA 26500: Linear Algebra	January 2012 – May 2012
	August 2011 – December 2011
	January 2008 – May 2008
MA 26600: Ordinary Differential Equations	January 2016 – May 2016
	January 2011 – May 2011
MA 30300: Differential Equations and Partial Differential Equations for Engineering and the Sciences	January 2016 – May 2016
	January 2013 – May 2013
	August 2012 – December 2012
	August 2010 – December 2010
MA 35100: Elementary Linear Algebra	January 2010 – May 2010
	January 2006 – May 2006
	January 2005 – May 2005
MA 35300: Linear Algebra II With Applications	August 2016 – December 2016
	January 2015 – May 2015
MA 36600: Ordinary Differential Equations	January 2009 – May 2009
	August 2008 – December 2008
	January 2007 – May 2007
	August 2004 – December 2004
MA 39000: Great Issues in Mathematics	January 2012 – May 2012
MA 45300: Elements of Algebra I	August 2014 – December 2014
	January 2014 – May 2014
MA 49000: Foundations of Analysis	August 2011 – December 2011
MA 49000: Zeroes of Polynomials	August 2011 – December 2011
MA 49000: Honors Thesis	January 2012 – May 2012
	January 2008 – May 2008
MA 49000: Galois Theory	August 2016 – December 2016
MA 49000: Modular Forms	August 2005 – December 2005
MA 49000: Dessins d'Enfants	August 2009 – December 2009
MA 51000: Vector Calculus	August 2013 – December 2013
	August 2008 – December 2008
MA 55300: Introduction to Abstract Algebra	January 2008 – May 2008
	August 2006 – December 2006
MA 59800: Algebraic Geometry	June 2013 – July 2013
	August 2012 – December 2012
	January 2008 – May 2008
	August 2005 – December 2005
MA 58400: Algebraic Number Theory	January 2013 – May 2013
MA 59800: Introduction to Dessins d'Enfants	August 2013 – December 2013
MA 59800: Introduction to Sheaves	June 2009 – July 2009
MA 59800: Introduction to Galois Representations	June 2016 – August 2016
MA 59800: Riemann-Roch Theorem	January 2009 – May 2009
MA 59800: Elliptic Curves	June 2013 – July 2013
	August 2006 – December 2006
	January 2005 – May 2005
MA 59800: Elliptic Curves and Cryptography	August 2011 – December 2011
MA 59800: Classical Modular Forms	June 2016 – August 2016
MA 59800: Modularity of Elliptic Curves	August 2011 – December 2011
MA 59800: Selmer Groups and Galois Representations	August 2009 – December 2009
MA 68400: Class Field Theory	January 2016 – May 2016

California Institute of Technology, Pasadena, California USA

Ma 5a: Introduction to Abstract Algebra	September 2002 – December 2002
Ma 7: Introduction to Number Theory	April 2004 – June 2004
Ma 105: Elliptic Curves	September 2002 – December 2002
Ma 160b: Algebraic Number Theory	January 2002 – March 2002
Ma 160c: Class Field Theory	April 2003 – June 2003
	April 2002 – June 2002
Ma 162b: Galois Representations	January 2004 – March 2004
Reading Course on Arithmetic of Elliptic Curves	April 2004 – June 2004
	September 2003 – December 2003

SERVICE

Editorial Boards
- La Matematica (Journal of the Association for Women in Mathematics)
  Associate Editor   2021 – present
- Essential Number Theory
  Associate Editor   2021 – present

Journals Refereed:
- American Mathematical Monthly   2012, 2010
- American Journal of Mathematics   2004, 2014
- Contemporary Mathematics Series   2007, 2020
- Arnold Mathematical Journal   2020
- Communications in Mathematical Analysis   2020
- Commentarii Mathematici Helvetici   2011
- Glasgow Mathematical Journal   2009, 2008
- International Journal of Number Theory   2011
- Journal of Integer Sequences   2013
- Journal of Number Theory   2012, 2022
- Journal of the London Mathematical Society (LMS)   2006
- Mathematical and Computer Modelling   2007
- Mathematics of Computation   2008
- Monatshefte für Mathematik   2008
- Notes on Number Theory and Discrete Mathematics   2014
- Notices of the American Mathematical Society (AMS)   2019
- Proceedings of the American Mathematical Society (AMS)   2006
- Research in Number Theory (RNT)   2018
- Rocky Mountain Journal of Mathematics   2021
- Rose-Hulman Undergraduate Mathematics Journal   2012
- Transactions of the American Mathematical Society (AMS)   2012

Conferences/Workshops Organized:
- MAA Southern California / Nevada Section Spring 2022 Meeting
  Pomona College   April 23, 2022
- Practicum for Undergraduates in Number Theory (PUNDiT)
  Institute for Pure and Applied Mathematics   October 16-17, 2021
- Western Algebraic Geometry Symposium (WAGS)
  Pomona College   November 13–14, 2020
- NAM Undergraduate MATHFest XXIX
  Southern University of New Orleans   September 27 – 29, 2019
- Riverside Mathematics Workshop for Excellence and Diversity
  University of California at Riverside   November 8, 2019
- NAM Regional Faculty Conference on Research and Teaching Excellence (FCRTE)
  Texas Southern University   April 26-27, 2019

- NAM Undergraduate MATHFest XXVIII
  Spelman College   September 28 – 30, 2018
- 2017 Field of Dreams Conference
  Renaissance St. Louis Airport Hotel   November 5–7, 2017
- NAM Undergraduate MATHFest XXVII
  Medgar Evers College   September 29 – October 1, 2017
- 2017 Indiana Undergraduate Mathematics Research Conference
  Purdue University   July 25, 2017
- NAM Regional Faculty Conference on Research and Teaching Excellence (FCRTE)
  Morehouse College   March 24-25, 2017
- 2016 Field of Dreams Conference
  Renaissance St. Louis Airport Hotel   November 4–6, 2016
- MAA Indiana Fall 2016 Sectional Meeting
  Purdue University   October 8, 2016
- SQuaRE: Visualizing Dessins d'Enfants
  American Institute of Mathematics   March 17 – 21, 2014
- Underrepresented Students in Topology and Algebra Research Symposium (USTARS)
  Purdue University   April 19 – 21, 2013
- Blackwell-Tapia Conference
  Institute for Computational and Experimental Research in Mathematics
  Brown University   November 9 – 10, 2012
- Blackwell Memorial Conference
  Howard University   April 19 – 20, 2012
- Interactive Parallel Computation
  in Support of Research in Algebra, Geometry and Number Theory
  Mathematical Sciences Research Institute   January 29 – February 2, 2007
- Undergraduate Mathematical Sciences Symposium
  California Institute of Technology   August 21, 2003

Conference Sessions Organized:
- MSRI (SLMath) Special Session on African Diaspora Joint Mathematics Working Groups
  (ADJOINT)
  with Anisah Nu'Man
  Joint Mathematics Meetings, Boston, Massachusetts   January 4, 2023
- Black Mathematicians Wikipedia Edit-A-Thon
  Joint Mathematics Meetings, Boston, Massachusetts   January 4, 2023
- Best Practices Towards a More Diverse and Inclusive Mathematical Community
  with IMU Committee for Women in Mathematics and IMU AdHoc Committee on Diversity
  International Congress of Mathematicians (Virtual Conference)   July 8, 2022
- ADJOINT (African Diaspora Joint Mathematics Workshop) Research Showcase
  with Caleb Ashley
  Joint Mathematics Meetings, Seattle, Washington   April 6, 2022
- Invited Paper Session on African American Women and the Mathematics of Flight
  MAA MathFest (Virtual Conference)   August 4, 2021
- AMS Special Session on ADJOINT Research Showcase
  with Hélène Barcelo
  Joint Mathematics Meetings (Virtual Conference)   January 9, 2021
- Research Session: Origami, Belyĭ Maps, and Dessins d'Enfants
  with Rachel Davis
  AWM Research Symposium, Houston, Texas   April 7, 2019
- At the Crossroads Between Number Theory and Representation Theory
  with Luis Alberto Lomelí
  SACNAS National Conference, Long Beach, California   October 13, 2016
- What Do I Do with My Bachelor's?

with Fabio Milnor
SACNAS National Conference, Long Beach, California   October 13, 2016
- Solving the Unsolvable Through Scientific Computing:
  Explorations in the Best Uses of Popular Mathematics Software
  with Alejandra Alvarado, Luis Melara, and Talitha Washington
  ACM Richard Tapia Celebration of Diversity in Computing   September 16, 2016
- Chicanos and Native Americans in the Mathematics Sciences
  with Alejandra Alvarado
  SACNAS National Conference, Washington, District of Columbia   October 31, 2015
- Problems in Algebra and Diophantine Equations
  with Alejandra Alvarado
  SACNAS National Conference, Los Angeles, California   October 18, 2014
- Seminario Interuniversitario de Investigación en Ciencias Matemáticas
  with Carlos de la Mora
  Pontifical Catholic University, Ponce, Puerto Rico   March 1, 2014
- AMS Special Session on The Ubiquity of Dynamical Systems
  with Talitha Washington
  Joint Mathematics Meetings, Baltimore, Maryland   January 16–17, 2014
- Problems in Number Theory
  with Alejandra Alvarado
  SACNAS National Conference, San Antonio, Texas   October 12, 2012
- Sage Software Mini-Course
  with Alejandra Alvarado and William Stein
  Modern Math Workshop at SACNAS, Seattle, Washington   October 10, 2012

External Reviewer:
- Department of Mathematics, Grinnell College   April 2021 - May 2021
- Department of Mathematics, Occidental College   October 2021 - November 2021

Seminars Organized:
- ADVANCE PRiME Seminar, Purdue University   July 2011 – August 2011
- ADVANCE PRiME Seminar, Purdue University   June 2012 – August 2012
- ADVANCE PRiME Seminar, Purdue University   June 2013 – August 2013
- Automorphic Forms Seminar, Purdue University   August 2011 – May 2018
  http://bit.ly/tBb286
- Department of Mathematics Colloquium, Purdue University   August 2017 – May 2018
- Number Theory Seminar, Purdue University   March 2006 – May 2018
- Number Theory Seminar, Caltech   September 2001 – August 2004

Grant Proposals Reviewed:
- American Mathematical Society (AMS) – National Security Agency (NSA)   2008
- Banff International Research Station for Mathematical Innovation and Discovery (BIRS) 2017
- Ford Foundation Fellowship Programs Physical Sciences
  Review Panelist   2014, 2015, 2016
- National Science Foundation (NSF) Division of Mathematical Sciences (DMS)
  Panelist   2011, 2012, 2018, 2020, 2021
- National Science Foundation (NSF) Division of Undergraduate Education (DUE)
  Mail/Ad-Hoc Merit Reviewer   2017, 2020
  Panelist   2018
- National Science Foundation (NSF) Human Resource Development (HRD)
  Mail/Ad-Hoc Merit Reviewer   2016, 2018
  Panelist   2017
- National Science Foundation (NSF) Graduate Research Fellowship Program
  Panelist   2013, 2015, 2016

Committees Served:

- 4S Education Foundation
  Advisory Committee   2017 – present
- American Association for the Advancement of Science (AAAS)
  AAAS Annual Meeting Scientific Program Committee   2021 – 2024
- American Institute of Mathematics (AIM)
  Human Resources (HR) Board   September 2015 – August 2021
  Research Experiences for Undergrad Faculty (REUF) Advisory Board   May 2015 – present?
- American Institute of Physics Foundation
  TEAM-UP Together Campaign Committee   January 20, 2023 – January 19, 2025
- American Mathematical Society (AMS)
  AMS Simons Research Enhancement Grants for Primarily Undergraduate Institution (PUI)
  Faculty Committee   February 1, 2022 – January 31, 2025 Central Section Program
  Committee (CENTRAL)   February 1, 2015 – January 31, 2017
  Central Section Program Committee Chair   February 1, 2016 – January 31, 2017
  Committee on Meetings and Conferences (COMC)   February 1, 2018 – January 31, 2021
  Committee on Committees (CONC)   February 1, 2021 – January 31, 2023
  Committee on the Profession (COPROF)   February 1, 2022 – January 31, 2025
  COPROF Task Force Report Review Subcommittee, Chair   April 1, 2022 – September 1,
  2022 e-Mentoring Network in the Mathematical Sciences Blog   2012 – 2016
  Inclusion/Exclusion Blog   2017
  Prize Oversight Committee   February 1, 2022 – January 31, 2025

- Arizona Winter School
  Advisory Board   2018 – 2021
- Art of Problem Solving Initiative, Inc.
  Board of Directors   2020 – present
  Audit Committee   2021 – present
- Association of Members of the Institute for Advanced Study (AMIAS)
  Board of Trustees   January 1, 2022 – December 31, 2024
- Association for Women in Mathematics
  Scientific Advisory Committee   June 1, 2021 – January 31, 2024
- California Institute of Technology
  Black Alumni Council   2021 – present
  Distinguished Alumni Selection Committee   2020 – 2022
  SURF Board of Directors   October 2022 – September 2025
- College Bridge
  Board of Directors   2020 – present
- Conference Board of the Mathematical Sciences (CBMS)
  Council Member   May 2015 – May 2020
  Executive Committee Member-at-Large   May 2019 – May 2021
- Initiative for Mathematics Learning by Inquiry (MLI)
  Member, Board of Directors   July 22, 2017 – December 31, 2020
- Institute for Computational and Experimental Research in Mathematics (ICERM)
  Education Advisory Board (EAB)   July 1, 2022 – June 30, 2025
- International Mathematical Union (IMU)
  AdHoc Committee on Diversity (CoD)   2020 – 2026
- Institute for Pure and Applied Mathematics (IPAM)
  Board of Trustees   February 1, 2022 – January 31, 2025
- Karen EDGE Fellowship Program   2019 – 2020
- Mathematicians of the African Diaspora (MAD)
  Editorial Board   2011 – present
- Mathematical Association of America (MAA)

Committee on Graduate Students	January 1, 2016 – December 31, 2016
Committee on Graduate Students, Chair	January 1, 2017 – January 31, 2020
Committee on the Inclusivity Prize	January 1, 2022 – January 31, 2025
Committee on Minority Participation in Mathematics	January 1, 2016 – January 31, 2019
Council on Prizes and Awards (COPA)	July 1, 2023 – July 31, 2026
Invited Address Committee for MathFest 2018	2017
MAA Congress Chair	February 1, 2022 – January 31, 2024
MAA Congress Elections Committee	February 1, 2021 – January 31, 2022
MAA Congress Subgroup on Widening Membership	March 2021 – August 2021
MAA Congress Rep of the SoCal/Nevada Section	July 1, 2019 – June 30, 2022
Social Media Task Force	January 1, 2016 – January 31, 2017

- Mathematical Sciences Research Institute (MSRI)

Human Resources Advisory Committee (HRAC)	2013 – 2016
African Diaspora Joint Mathematics Workshop (ADJOINT) Director	2019 – present

- National Alliance for Doctoral Studies in the Mathematical Sciences

Associate Director	2015 – 2017

- Park City Mathematics Institute (PCMI)

Diversity Sub-Committee	2010 – 2018

- Pomona College

DEI Faculty Cohort 2	Fall 2021
Department of Physics APS-IDEA Team	Fall 2020 – Present
Department of Politics Search Committee (External Member)	Fall 2019 – Spring 2020
Faculty Personnel Committee	Fall 2021 – Spring 2023
FPC Subcommittee (Cabinet Member Designate)	Spring 2021
Posse Chicago Mentor	Fall 2021 – Spring 2023
Student Activities Committee	Fall 2020 – Spring 2021

- Purdue University

College of Science Working Group: Science as an Undergrad Destination	2015 – 2016
MLK Planning Committee	2015 – 2017
Department of Mathematics Colloquium Chair	2017 – 2018
Department of Mathematics Computer Committee	2012 – 2018
Department of Mathematics Diversity Committee (Chair)	2017 – 2018
Department of Mathematics Graduate Committee	2012 – 2016
Department of Mathematics Recruitment Committee	2010 – 2016

- University of California at Riverside

"Riverside Mathematics Workshop for Excellence and Diversity" Planning Committee	2019

- Western Algebraic Geometry Symposium (WAGS)

Diversity Committee	2015 – 2022

Student Organizations Advised:
- Caltech Undergraduate Mathematics Club   2001 – 2004
- Pomona College Black in STEM   2020 – present
- Pomona College Student Chapter of the National Society of Black Physicists   2020 – present
- Purdue Mathematics Society   2011 – 2018

Postdoctoral Fellows Advised		
	Alejandra Alvarado	2011 – 2013
	Assistant Professor of Mathematics, Eastern Illinois University	
	Rachel Davis	2013 – 2016
	Golomb Visiting Assistant Professor of Mathematics, Purdue University	
	Carlos de la Mora	2012 – 2013
	Visiting Assistant Professor, Purdue University	
	Lois Simon	2012 – 2015
	Assistant Professor of Mathematics, Sungkyunkwan University	

Graduate Students Advised	Alexander J. Barrios	2012 – 2018
	Tyler Billingsley	2016 – 2020
	Jacob Bond	2015 – 2018
	Frankie Chan (switched advisors)	2016 – 2017
	Jeremy T. Fuller (did not finish)	2009 – 2019
	Amitava Ghosh (transferred institutions)	2012 – 2013
	Kevin M. Mugo	2006 – 2014
	Maria Salcedo Stadnik (transferred institutions)	2005 – 2007
	James Emmanuel Weigandt	2008 – 2015

PhD Defense Committees Served

Tyler Raven Billingsley
- Effective Injectivity of Specialization Maps for Elliptic Surfaces
  Purdue University — 2020

Dwight Anderson Williams, II
- Bases of Infinite-Dimensional Representations of Orthosymplectic Lie Superalgebras
  University of Texas at Arlington — 2020

Matthew Toeniskoetter
- Ideal Theory of Local Quadratic Transforms of Regular Local Rings
  Purdue University — 2017

Partha Solapurkar
- The Geodesic Geometry of Arithmetic Orbifolds
  Purdue University — 2017

Nicholas Michael Berman Miller
- The Geodesic Geometry of Arithmetic Orbifolds
  Purdue University — 2017

Jacob Aaron Boswell
- Prime Saturations and Rees Algebras of Almost Linearly Presented Ideals
  Purdue University — 2015

Jonathan Montaño
- Generalized Multiplicities, Reductions of Ideals, and Depth of Blowup Algebras
  Purdue University — 2015

Rodney Neal Lynch
- Arithmetic on Normal Forms of Elliptic Curves
  Indiana University – Purdue University at Indianapolis — 2015

James Emmanuel Weigandt
- Ranks of Elliptic Curves and Selmer Groups
  Purdue University — 2015

Gabriel Sosa
- On Monomial Orders, Koszul Algebras and Toric Rings
  Purdue University — 2015

Kevin Mugo
- On Mod 4 Galois Representations From Elliptic Curves and a Certain Brauer Type Embedding Problem
  Purdue University — 2014

Vivek Mukundan
- Rees Algebras and Iterated Jacobian Duals
  Purdue University — 2016

Youngsu Kim
- Quasi-Gorensteinness of Extended Rees Algebras
  Purdue University — 2014

Lan Nguyen
- Rees Algebras of Linearly Presented Ideals
  Purdue University — 2013

YeanSu Kim

- *L*-Functions From Langlands-Shahidi Method for *GSpin* Groups and the Generic Arthur *L*-Packet Conjecture
  Purdue University   2013

Hui Gao
- Breuil's Conjecture on Strongly Divisible Lattices in the $r = p - 1$ Unipotent Case
  Purdue University   2013

Dustin Belt
- On the Holomorphy of Exterior-Square *L*-functions
  Purdue University   2012

Kwangho Choiy
- Transfer of Plancherel Measures between *p*-adic Inner Forms
  Purdue University   2012

Tung-Lin Tsai
- Stability of Gamma Factors for $GL(r) \times GL(r)$
  Purdue University   2011

Sangil Nahm
- Several Problems in Number Theory
  Purdue University   2011

Bogume Jang
- Transfer from $GSO(4)$ to $GL(4)$ and *L*-Functions
  Purdue University   2010

Lance Bryant
- Filtered numerical semigroups and applications to one-dimensional rings
  Purdue University   2009

Ning Shang
- Low Genus Algebraic Curves in Cryptography
  Purdue University   2009

Vadakkumkoor Sandeep Varma
- Descent and the Generic Packet Conjecture
  Purdue University   2009

Yu Xie
- Formulas for the Multiplicity of Graded Algebras
  Purdue University   2009

Qingwu Yu
- Image of Transfer from $GL(2) \times GL(3)$ to $GL(6)$
  Purdue University   2008

Luis Alberto Lomelí
- Functoriality for the classical groups over function fields
  Purdue University   2007

Wook Kim
- Standard module conjecture for *GSpin* groups
  Purdue University   2005

Kimball Martin
- Four-dimensional Galois representations of solvable type and automorphic forms
  California Institute of Technology   2004

Jason Colwell
- The Conjecture of Birch and Swinnerton-Dyer for elliptic curves with complex multiplication by a nonmaximal order
  California Institute of Technology   2003

Qiang Lin
- Bloch-Kato conjecture for the adjoint of $H_1(X_0(N))$ with integral Hecke algebra
  California Institute of Technology   2003

Song Wang
- An effective version of the Grunwald-Wang theorem"

California Institute of Technology   2001

1. Muhammad Ahmed Tajammul Chaudhry
   - Games on Platonic Solids
   Pomona College   2019

2. Gbekeloluwa "Gbeke" Anita Fawehinmi
   - An Analysis of Mathematics Culture in Theater and Mathematics Content in Film
   Pomona College   2019

3. Peter Heckendorn
   - On Students' Understanding of Mathematical Proofs
   Pomona College   2021

4. Isys Johnson
   - Action Recognition of Highly Dynamic Videos using Time Series Classification
   Pomona College   2020

5. Bharathrham Kodungudi
   - Group Theory of Rubik's Polyhedra
   Pomona College   2020

6. Victor Manuel Machado
   - Elliptic Curves and Apple's HomeKit
   Pomona College   2019

7. Colin McCalla
   - Mastering 2D Video Games with Neural Networks
   Pomona College   2020

8. Joseph Ben Moats
   - Visualizations of Hyperbolic Geometry
   Pomona College   2020

9. Mikaela Ku'ikeponolani Nishida
   - On the Error Term in the Sato-Tate Conjecture
   Pomona College   2021

10. Sireesh Vinnakota
    - Dessin d'Enfants on Non-Orientable Surfaces
    Pomona College   2021

1. Kathleen P. Ansaldi
   - Assistant Professor of Mathematics, Kalamazoo College   Present
   - Doctorate of Philosophy (PhD) in Mathematics, University of Notre Dame   2016
   - Masters of Science (MS) in Mathematics, University of Nebraska at Lincoln   2008
   - Bachelor of Science (BS) in Mathematics, Loyola University Maryland   2006
   - In Search of an 8: Rank Computations on a Family of Quartic Curves
   Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University   2005

2. Jose Ayala
   - Teach for America   Present
   - Master of Arts (MA) in Mathematics, University of Southern California   2013
   - Bachelor of Science (BS) in Mathematics, California State Polytechnic University at Pomona
   2011
   - Decrypting Text Messages via Elliptic Curve Factorization
   Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP), MSRI 2010

3. Ronald Archer

- Bachelor of Science (BS) in Mathematics, Purdue University — 2014
- The Fermat Equation of Exponent Three over Quadratic Extensions
  Purdue Research in Mathematics Experience (PRiME), Purdue University — 2012

4. Myles Ashitey
   - Undergraduate Student, Pomona College — Present
   - Towards a Database of Belyĭ Maps
     Pomona Research in Mathematics Experience (PRiME), Pomona College — 2019

5. Leonardo Azopardo
   - Software Engineer at FactSet — Present
   - Bachelor of Science (BS) in Mathematics, Purdue University — 2016
   - Visualizing Dessins d'Enfants on the Torus
     Purdue Research in Mathematics Experience (PRiME), Purdue University — 2015

6. Edwin Baeza
   - Doctoral Student in Mathematics, University of Wisconsin at Madison — Present
   - Bachelor of Science (BS) in Mathematics, Purdue University — 2016
   - Michael Golomb Mathematics Award — 2016
   - Associating Finite Groups with Dessins d'Enfants
     Purdue Research in Mathematics Experience (PRiME), Purdue University — 2014

7. Luis Armando Baeza
   - Bachelor of Science (BS) in Mathematics, Purdue University — 2017
   - Arthur Rosenthal Mathematics Scholarship — 2016
   - Associating Finite Groups with Dessins d'Enfants
     Purdue Research in Mathematics Experience (PRiME), Purdue University — 2014

8. Alexander J. Barrios
   - Doctoral Student in Mathematics, Purdue University — Present
   - Bachelor of Science (BS) in Mathematics, Brown University — 2011
   - MAA Undergraduate Poster Session Awardee — 2011
   - *ABC*-Triples in Families
     Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP), MSRI — 2010
   - SACNAS National Conference Undergraduate Poster Awardee — 2010

9. Brian Bishop
   - Undergraduate Student, Pomona College — Present
   - Towards a Database of Belyĭ Maps
     Pomona Research in Mathematics Experience (PRiME), Pomona College — 2019

10. Jonathan D. Blair
    - Market Research Project Manager, Texas Instruments — Present
    - Master of Science (MS) in Business Analytics, University of Tennessee at Knoxville — 2014
    - Bachelor of Science (BS) in Mathematical Statistics, Purdue University — 2013
    - Rational Distance Sets on Conic Sections
      Louis Stokes Alliance for Minority Participation (LSAMP), Purdue University — 2011

11. Katrina Elizabeth Eidolon Biele
    - Doctoral Student in Mathematics, University of California at Berkeley — Present
    - Bachelor of Arts (BA) in Mathematics, University of Colorado at Colorado Springs — 2014
    - Associating Finite Groups with Dessins d'Enfants
      Purdue Research in Mathematics Experience (PRiME), Purdue University — 2013

12. Kendall Bowens
    - Undergraduate Student, Tuskeegee University — Present
    - Towards a Database of Belyĭ Maps
      Pomona Research in Mathematics Experience (PRiME), Pomona College — 2019

13. Kevin Bowman
    - Recovery Specialist, Macy's — Present

- Bachelor of Science (BS) in Mathematics, Morehouse College 2014
- Drawing Planar Graphs via Dessins d'Enfants
  Purdue Research in Mathematics Experience (PRiME), Purdue University 2013

14. Renee Brady
    - Doctorate (PhD) in Applied Mathematics, Doctoral Student in Applied Mathematics, North Carolina State University 2017
    - Master of Science (MS) in Applied Mathematics, North Carolina State University 2014
    - Bachelor of Science (BS) in Mathematics, Florida A&M University 2011
    - Encrypting Text Messages via Elliptic Curve Cryptography
      Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP), MSRI 2010

15. Terris D. Brooks
    - 10th grade Geometry Teacher, University of Chicago Charter School: Woodlawn Campus (UCW) Present
    - Bachelor of Science (BS) in Mathematics, Central State University 2007
    - Elliptic Curves with Torsion Subgroup $Z_2 \times Z_8$: Does a Rank 4 Curve Exist?
      Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University 2006

16. Juan Cervantes
    - Doctoral Student in Statistics and Actuarial Science, University of Iowa Present
    - MAster's of Science (MS) in Statistics, University of Iowa 2013
    - Bachelor of Science (BS) in Mathematics, Lewis and Clark 2011
    - Searching for Elliptic Curves with Rank 9
      Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP), MSRI 2010

17. Sheena Chandrasekharan
    - Social Marketing Analyst, Scientific Games Present
    - Bachelor of Science (BS) in Applied Statistics, Purdue University 2015
    - Drawing Planar Graphs via Dessins d'Enfants
      Purdue Research in Mathematics Experience (PRiME), Purdue University 2013

18. Jarrod A. Cunningham
    - Bachelor of Science in Mathematics and Physics, University of South Alabama 2014
    - On Large Rational Solutions of Cubic Thue Equations: What Thue Did to Pell
      Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University 2004

19. Sergio García Currás
    - Bachelor of Science in Mathematics, University of Puerto Rico at Rio Piedras 2015
    - The Fermat Equation of Exponent Three over Quadratic Extensions
      with Jamie Weigandt
      Summer Research Opportunity Program (SROP) / Purdue University 2012

20. Naleceia Davis
    - Lead Generation Specialist, DataPath Inc. Present
    - Master of Business Administration (MBA), University of Arkansas at Little Rock 2015
    - Graduate Student in Operations Research, North Carolina State University 2012
    - Bachelor of Science (BS) in Mathematics, Spelman College 2011
    - Encrypting Text Messages via Elliptic Curve Cryptography
      Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP), MSRI 2010

21. Alexander Diaz-Lopez
    - Visiting Assistant Professor of Mathematics and Statistics, Swarthmore College Present
    - Doctorate in Mathematics, Notre Dame 2016
    - Heidelberg Laureate Forum (HLF) Attendee 2015
    - Bachelor of Arts (BA) in Mathematics, University of Puerto Rico at Mayagüez 2011
    - Poster Award, Joint Mathematics Meeting 2011

- Poster Award, SACNAS National Conference   2010
- Squares in Arithmetic Progressions
  Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP), MSRI 2010

22. Yuan Feng
- Technology Analyst, Morgan Stanley   Present
- Master of Science (MS) in Data Science, New York University   2016
- Bachelor of Science (BS) in Math & Econ, University of Illinois at Urbana-Champaign 2014
- Associating Finite Groups with Dessins d'Enfants
  Purdue Research in Mathematics Experience (PRiME), Purdue University   2013

23. Tayler Fernandez-Nunez
- Undergraduate Student, Northeastern University   Present
- Towards a Database of Belyĭ Maps
  Pomona Research in Mathematics Experience (PRiME), Pomona College   2019

24. Jessica Flores
- IT Specialist, Tri-Lin Integrated Services Inc.   Present
- ?? in Mathematics, University of Puerto Rico at Humacao   ??
- A Statistical Analysis of 2-Selmer Groups for Elliptic Curves with Torsion Subgroup $Z_2 \times Z_8$
  Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University   2007

25. Zachary Flores
- Graduate Student in Mathematics, University of Kansas   Present
- Master of Science (MS) in Mathematics, Colorado State University   2014
- Bachelor of Science (BS) in Mathematics,Michigan State University   2011
- Squares in Arithmetic Progressions
  Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP), MSRI 2010

26. Allison R. Ford
- Mary Baldwin College   ??
- In Search of an 8: Rank Computations on a Family of Quartic Curves
  Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University   2005

27. Elizabeth A. Fowler
- Maryville College   ??
- Elliptic Curves with Torsion Subgroup $Z_2 \times Z_8$: Does a Rank 4 Curve Exist?
  Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University   2006

28. Jennifer L. George
- Miami University   ??
- In Search of an 8: Rank Computations on a Family of Quartic Curves
  Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University   2005

29. Kayla Gibson
- Undergraduate Student, University of Iowa   Present
- Towards a Database of Belyĭ Maps
  Pomona Research in Mathematics Experience (PRiME), Pomona College   2019

30. Kaibo Gong
- Bachelor of Science (BS) in Mathematics, Purdue University   2012
- Zeroes of Iterated Polynomials
  Purdue University   2011

31. Ivan Gonzalez
- Bachelor of Science (BS) in Mathematics, Florida International University   2017

- Toroidal Belyĭ Pairs and their Monodromy Groups
  Purdue Research in Mathematics Experience (PRiME), Purdue University   2016

32. Shweta Rajiv Vaidya Gupte
    - Master of Science (MS) in Computer Engineering, Purdue University   2014
    - Bachelor of Science (BS) in Mathematics and Computer Science, Purdue University   2009
    - Using Parallel Computing to Search for High Rank Elliptic Curves
      Purdue University   2008
    - Presented at the Grace Hopper Celebration for Women in Computing   2008

33. Katherine C. Hastings
    - Baldwin Wallace College   ??
    - Elliptic Curves with Torsion Subgroup $Z_2 \times Z_8$: Does a Rank 4 Curve Exist?
      Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University   2006

34. David Heras
    - Bachelor of Science (BS) in Mathematics, College of William and Mary   2014
    - Associating Finite Groups with Dessins d'Enfants
      Purdue Research in Mathematics Experience (PRiME), Purdue University   2013

35. Danielle L. Hiance
    - Campbellsville University   ??
    - Elliptic Curves with Torsion Subgroup $Z_2 \times Z_8$: Does a Rank 4 Curve Exist?
      Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University   2006

36. Nancy Ho
    - Mills College   ??
    - On Large Rational Solutions of Cubic Thue Equations: What Thue Did to Pell
      Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University   2004

37. Samuel Ivy
    - United States Military Academy   ??
    - North Carolina State University   ??
    - Dissertation Fellowship, Ford Foundation   2014
    - Morehouse College   ??
    - 4-Covering Maps on Elliptic Curves with Torsion Subgroup $Z_2 \times Z_8$
      Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University   2008

38. Dionel Jaime
    - Bachelor of Science (BS) in Mathematics, University of Rochester   2018
    - Toroidal Belyĭ Pairs and their Monodromy Groups
      Purdue Research in Mathematics Experience (PRiME), Purdue University   2016

39. Brett Jefferson
    - Graduate Student in Philosophy, Indiana University   ??
    - Morgan State University   ??
    - 4-Covering Maps on Elliptic Curves with Torsion Subgroup $Z_2 \times Z_8$
      Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University   2008

40. Erin Jones
    - Carlton College   ??
    - Decrypting Text Messages via Elliptic Curve Factorization
      Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP), MSRI   2010

41. Kimberly Jones
    - Savannah State University   ??

- A Statistical Analysis of 2-Selmer Groups for Elliptic Curves with Torsion Subgroup $Z_2 \times Z_8$
  Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University   2007

42. Michele Josey
    - North Carolina Central University   ??
    - 4-Covering Maps on Elliptic Curves with Torsion Subgroup $Z_2 \times Z_8$
      Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University   2008

43. Harlan Mark Kadish
    - Doctor of Philosophy (PhD) in Mathematics, University of Michigan   2011
    - Bachelor of Science (BS) in Mathematics, California Institute of Technology   2006
    - On the Torsion Subgroups of $\mathbb{Q}$-Curves
      Summer Undergraduate Research Fellowship (SURF), Caltech   2004
    - A Generalization of a Theorem of Gauss for Fermat Curves of Exponent 7
      Summer Undergraduate Research Fellowship (SURF), Caltech   2003

44. Kelsy Kinderknecht
    - University of Kansas   ??
    - Searching for Elliptic Curves with Rank 9
      Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP), MSRI 2010

45. Connor Lawrence
    - Jean Rubin Mathematics Scholarship   2016
    - Associating Finite Groups with Dessins d'Enfants
      Purdue Research in Mathematics Experience (PRiME), Purdue University   2014

46. Anji Li
    - Purdue University   ??
    - Drawing Planar Graphs via Dessins d'Enfants
      Purdue Research in Mathematics Experience (PRiME), Purdue University   2013

47. Hongshan Li
    - Bachelor of Science (BS) in Mathematics, Purdue University   2013
    - Rings of Invariants inside $\mathbb{Q}[x_1, \ldots, x_7]$ Corresponding to Subgroups of S_7
      with David Goldberg
      Summer Research Project, Purdue University   2011

48. Caitlin Lienkaemper
    - Bachelor of Science (BS) in Mathematics, Harvey Mudd College   2017
    - Toroidal Belyĭ Pairs and their Monodromy Groups
      Purdue Research in Mathematics Experience (PRiME), Purdue University   2016

49. Han Liu
    - Bachelor of Science (BS) in Mathematics, Purdue University   2013
    - The Fermat Equation of Exponent Three over Quadratic Extensions
      Purdue Research in Mathematics Experience (PRiME), Purdue University   2012

50. Karen Lostritto
    - Doctorate (PhD) in Bioinformatics, Yale University   ??
    - Brown University   ??
    - On Large Rational Solutions of Cubic Thue Equations: What Thue Did to Pell
      Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University   2004

51. Megan Ly
    - Loyola Marymount University   ??
    - Rational Distance Sets on Conic Sections
      Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP), MSRI 2010

52. Amanda Llewellyn
   - Bachelor of Science (BS) in Mathematics, Harvey Mudd College   2014
   - Drawing Planar Graphs via Dessins d'Enfants
     Purdue Research in Mathematics Experience (PRiME), Purdue University   2013

53. Davin B. Maddox
   - On the Ranks of Elliptic Curves
     Summer Undergraduate Research Fellowship (SURF), Caltech   2003
   - Heron Triangles and Elliptic Curves
     Summer Undergraduate Research Fellowship (SURF), Caltech   2002

54. Benito Martinez
   - The Fermat Equation of Exponent Three over Quadratic Extensions
     Purdue Research in Mathematics Experience (PRiME), Purdue University   2012

55. Charles McBrearty
   - Master of Science (MS) in Computer Science, Harvard University   2008
   - Bachelor of Science (BS) in Mathematics, California Institute of Technology   2006
   - Representations of $GL_3(\mathbb{F}_2)$
     Summer Undergraduate Research Fellowship (SURF), Caltech   2004

56. Bronz D. McDaniels
   - Examples of Belyĭ Maps for Elliptic Curves
     Purdue Research in Mathematics Experience (PRiME), Purdue University   2015

57. Jon A. Middleton
   - Doctorate (PhD) in Mathematics, University of California at San Diego   ??
   - SUNY Buffalo   ??
   - On Large Rational Solutions of Cubic Thue Equations: What Thue Did to Pell
     Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University   2004

58. Maxim Millan
   - Visualizing Dessins d'Enfants on the Torus
     Purdue Research in Mathematics Experience (PRiME), Purdue University   2015

59. Kevin M. Mugo
   - Doctorate (PhD) in Mathematics, Purdue University   ??
   - Otterbein College   ??
   - In Search of an 8: Rank Computations on a Family of Quartic Curves
     Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University   2005

60. Steve Mussmann
   - Doctoral Student in Computer Science, Stanford University   Present
   - Heidelberg Laureate Forum (HLF) Attendee   2016
   - National Science Foundation (NSF) Graduate Research Fellowship Awardee   2016
   - Hertz Foundation Fellowship Finalist   2016
   - Bachelor of Science (BS) in Computer Science/Mathematics/Statistics, Purdue University   2015
   - G. A. Ross Award (Outstanding Senior Man), Purdue University   2015
   - Churchill Scholarship Finalist   2015
   - Bruce Halpert Award (Outstanding Math Junior), Purdue University College of Science   2014
   - Outstanding Junior, Purdue University Department of Mathematics   2014
   - Outstanding Junior, Purdue University Department of Statistics   2014
   - V. L. Andersen Award, Purdue University Department of Statistics   2013
   - Baxter Award, Purdue University Department of Mathematics   2013

- The Fermat Equation of Exponent Three over Quadratic Extensions
  Purdue Research in Mathematics Experience (PRiME), Purdue University   2012
- Outstanding Freshman, Purdue University Department of Mathematics   2012

61. Keatra Nesbitt
  - University of Northern Colorado   ??
  - Searching for Elliptic Curves with Rank 9
    Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP), MSRI 2010

62. Shane Nicklas
  - Constructing Groups with Prescribed Sylow Subgroups
    Personal Research Project, Purdue University   2014-15

63. Gabriel Ngwe
  - Bachelor of Science (BS) in Mathematics, Williams College   2017
  - Toroidal Belyĭ Pairs and their Monodromy Groups
    Purdue Research in Mathematics Experience (PRiME), Purdue University   2016

64. Cheryl Outing
  - Spelman College   ??
  - 4-Covering Maps on Elliptic Curves with Torsion Subgroup $Z_2 \times Z_8$
    Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University   2008

65. Charles E. Phifer
  - Morehouse College   ??
  - In Search of an 8: Rank Computations on a Family of Quartic Curves
    Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University   2005

66. Baiming Qiao
  - Bachelor of Science (BS) in Mathematics, Purdue University   2017
  - Toroidal Belyĭ Pairs and their Monodromy Groups
    Purdue Research in Mathematics Experience (PRiME), Purdue University   2016

67. Yao Qiu
  - Dessins d'Enfants on the Torus
    Purdue University   2013

68. Brad Rodgers
  - Postdoctoral Fellow, University of Michigan   Present
  - Postdoctoral Fellow, Institut für Mathematik/Universität Zürich   2013
  - Doctorate of Philosophy (PhD) in Mathematics, University of California at Los Angeles 2013
  - Bachelor of Science (BS) in Mathematics, Purdue University   2008
  - Budapest Semesters in Mathematics   2007
  - Ramanujan-Type Identities
    Personal Research Project, Purdue University   2005

69. Anne Rollick
  - John Carroll University   ??
  - A Statistical Analysis of 2-Selmer Groups for Elliptic Curves with Torsion Subgroup $Z_2 \times Z_8$
    Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University   2007

70. Anika Alexandra Rounds
  - Master of Science (MS) in Applied Mathematics, Tufts University   2014
  - Bachelor of Science (BS) in Mathematics, Purdue University   2012
  - Topics in Real Analysis
    Senior Thesis, Purdue University   2012

- Dessins d'Enfants
  Purdue University
  2011
- 3rd Place, NAM MATHFest XXI Speaking Competition
  2011

71. Yesid Alberto Sánchez Arias
    - Examples of Belyĭ Maps for Elliptic Curves
      Purdue Research in Mathematics Experience (PRiME), Purdue University
      2015

72. Tanya Singh
    - Bachelor of Engineering (BEng) in Comp Sci and Eng, College of Engineering Guindy 2012
    - Finding High Rank Elliptic Curves with Torsion Subgroup $Z_2 \times Z_8$
      Personal Research Project, Purdue University
      2011

73. Toya Skeete
    - Spelman College
      ??
    - Decrypting Text Messages via Elliptic Curve Factorization
      Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP), MSRI 2010

74. Sofia Sorokina Lyrintzis
    - Examples of Belyĭ Maps for Elliptic Curves
      Purdue Research in Mathematics Experience (PRiME), Purdue University
      2015

75. Alan Stephenson
    - Senior Program Manager at Microsoft
      Present
    - Bachelor of Science (BS) in Computer Systems Technology, Purdue University
      2008
    - Computing the number of 6×6 magic squares
      Personal Research Project, Purdue University
      2005

76. Danny Edward Sweeney
    - Undergraduate Student, Purdue University
      ??
    - Examples of Belyĭ Maps for Elliptic Curves
      Purdue Research in Mathematics Experience (PRiME), Purdue University
      2015

77. Ahmed Tadde
    - Undergraduate Student, Howard University
      ??
    - Associating Finite Groups with Dessins d'Enfants
      Purdue Research in Mathematics Experience (PRiME), Purdue University
      2013

78. Clifford Taylor
    - Grand Valley State University
      ??
    - 4-Covering Maps on Elliptic Curves with Torsion Subgroup $Z_2 \times Z_8$
      Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University
      2008

79. Cameron D. Thomas
    - Undergraduate Student, Morehouse College
      Present
    - Towards a Database of Belyĭ Maps
      Pomona Research in Mathematics Experience (PRiME), Pomona College
      2019

80. Nikia T. Thomas
    - Morgan State University
      ??
    - On Large Rational Solutions of Cubic Thue Equations: What Thue Did to Pell
      Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University
      2004

81. Sarah Thomaz
    - Doctoral Student in Economics, University of California at Irvine
      Present
    - Bachelor of Science (BS) in Mathematics, Purdue University
      2016
    - Featured in the Purdue Exponent
      2016
    - Visualizing Dessins d'Enfants on the Torus
      Purdue Research in Mathematics Experience (PRiME), Purdue University
      2015

82. Caleb Tillman
    - Reed College ??
    - *ABC*-Triples in Families
      Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP), MSRI 2010

83. Anna Tracy
    - Sewanee: the University of the South ??
    - Encrypting Text Messages via Elliptic Curve Cryptography
      Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP), MSRI 2010

84. Shawn Tsosie
    - University of Massachusetts at Amherst ??
    - Rational Distance Sets on Conic Sections
      Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP), MSRI 2010

85. Pam Urresta
    - Union College ??
    - Rational Distance Sets on Conic Sections
      Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP), MSRI 2010

86. Markus Vasquez
    - Doctoral Student in Mathematics, University of California at Berkeley Present
    - Bachelor of Science (BS) in Mathematics, Oklahoma State University 2010
    - Squares in Arithmetic Progressions
      Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP), MSRI 2010

87. Chenkai Wang
    - Bachelor of Science (BS) in Mathematics, Purdue University 2015
    - Associating Finite Groups with Dessins d'Enfants
      Purdue Research in Mathematics Experience (PRiME), Purdue University 2014

88. Charles Watts
    - Morehouse College ??
    - *ABC*-Triples in Families
      Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP), MSRI 2010

89. James Emmanuel "Jamie" Weigandt
    - Doctorate of Philosophy (PhD) in Mathematics, Purdue University 2015
    - National Science Foundation (NSF) Graduate Research Fellowship Awardee 2009
    - Purdue University ??
    - 2-Selmer Groups of Elliptic Curves
      Senior Thesis, Purdue University 2008
    - A Statistical Analysis of 2-Selmer Groups for Elliptic Curves with Torsion Subgroup $Z_2 \times Z_8$
      Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University 2007

90. Staci White
    - Shawnee State University ??
    - 4-Covering Maps on Elliptic Curves with Torsion Subgroup $Z_2 \times Z_8$
      Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University 2008

91. Andrew Yang
    - Determining the Isogeny Class of Elliptic Curves from mod ℓ Representations
      Senior Thesis, California Institute of Technology 2004

92. Lirong "Meg" Yuan
    - The Fermat Equation of Exponent Three over Quadratic Extensions
      Purdue Research in Mathematics Experience (PRiME), Purdue University 2012

93. Matthew A. Zimmerman

- Central State University ??
- Elliptic Curves with Torsion Subgroup $Z_2 \times Z_8$: Does a Rank 4 Curve Exist?
  Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI), Miami University 2006

AFFILIATIONS   American Association for the Advancement of Science (AAAS)
- Member 2022 – present
American Mathematical Society (AMS)
- Member ?? – present
- http://www.ams.org/mathscinet/search/author.html?mrauthid=677806
AMS Blog: "E-Mentoring Network in the Mathematical Sciences"
- Editor/Contributor 2012 – 2016
AMS Blog "Inclusion/Exclusion"
- Editor 2017
Association for Women in Mathematics (AWM)
- Member ?? – present
- Fellow 2019
Benjamin Banneker Association, Inc.
- Member 2017 – present
Black Graduate Students Association (BGSA), California Institute of Technology
- Secretary 2002 – 2004
Black Graduate Students Association (BGSA), Stanford University
- Vice-President 1998 – 1999
- President 1996 – 1997
- Treasurer 1995 – 1996
Chicano/Latino Graduate Students Association (CLGSA), Stanford University
- Co-Chair 1998 – 1999
- Treasurer 1997 – 1998
Conference of African-American Researchers in the Mathematical Sciences (CAARMS)
Graduate Student Mathematics Association, Stanford University
- President 1995 – 1996
Mathematical Association of America (MAA)
- Member 2008 – 2021
- Lifetime Member 2021 – present
Mathematics Society, Purdue University
- Advisor 2011 – 2018
National Alliance for Doctoral Studies in the Mathematical Sciences
- Mentor 2009 – 2018
National Association for the Advancement of Colored People (NAACP)
National Association of Mathematicians (NAM)
- Lifetime Member 2011 – present
- President 2015 – 2020
National Conference of Black Physics Students (NCBPS)
National Society of Black Physicists (NSBP)
- Lifetime Member 2020 – present
NSF INCLUDES: WATCH US
(Women Achieving through Community Hubs in the United States)
- Advisory Board Member 2016 – 2019
Park City Mathematics Institute (PCMI) Diversity Sub-Committee
- Member 2010 – 2018
Society for the Advancement of Chicanos and Native Americans in the Sciences (SACNAS)
- Lifetime Member 2005 – present
Society for Industrial and Applied Mathematics (SIAM)
- Member 2019 – present

Undergraduate Mathematics Club, California Institute of Technology
- Advisor   2002 – 2004

Wolfram Faculty Program
- Username: `edraygoins`   2010 – present

WEB PRESENCE
Academic.edu	`https://purdue.academia.edu/EdrayGoins`
California Institute of Technology	`http://www.math.caltech.edu/people/goins.html`
Google Books	`http://books.google.com/books?q=edray+goins`
Google Scholar	`https://scholar.google.com/citations?user=AKAZXMEAAAAJ&hl=en`
Institute for Advanced Study	`http://www.ias.edu/people/cos/users/goins`
MathOverFlow	`http://mathoverflow.net/users/6563/edray-herber-goins`
Microsoft Academic Search	`http://academic.research.microsoft.com/Author/13086054`
National Center for Biotechnology Information (NCBI)	
.	`https://www.ncbi.nlm.nih.gov/myncbi/1tAySKElccyUHK/cv/425818/`
On-Line Encyclopedia of Integer Sequences	`http://oeis.org/search?q=Edray+Goins`
ORCID	`http://orcid.org/0000-0002-0792-1000`
Pomona College	`https://www.pomona.edu/directory/people/edray-goins`
Purdue University	`http://www.math.purdue.edu/people/bio/?user=egoins`
ResearchGate	`https://www.researchgate.net/profile/Edray_Goins`
StackExchange	`http://stackexchange.com/users/2944373`

REFERENCES

Daniel W. Bump, Professor of Mathematics
Stanford University   `http://math.stanford.edu/~bump/`

Dinakar Ramakrishnan, Professor of Mathematics
California Institute of Technology   `http://www.math.caltech.edu/people/dinakar.html`

William A. Stein, Professor of Mathematics
University of Washington   `http://wstein.org/`

Richard Taylor, Professor of Mathematics
Stanford University   `https://mathematics.stanford.edu/people/richard-taylor`

CITIZENSHIP   Born on June 29, 1972 in Los Angeles, California, United States

BIOGRAPHY   Edray Herber Goins grew up in South Los Angeles, California. The product of the Los Angeles Unified (LAUSD) public school system, Dr. Goins attended the California Institute of Technology, where he majored in mathematics and physics, and earned his doctorate in mathematics from Stanford University. Dr. Goins is currently a Professor of Mathematics at Pomona College in Claremont, California. He works in the field of number theory, as it pertains to the intersection of representation theory and algebraic geometry.

California Institute of Technology. He was quite involved with the under-represented student community during his undergraduate years, from 1990 through 1994. He was one of the founding members of the Caltech chapter of the National Society of Black Engineers (NSBE); was a member of the Caltech Latino Science and Engineering Society (CLASES); established the Underrepresented Student Banquet and Awards Ceremony (now called the Celebration of Excellence); was a teaching assistant in the Young Engineering Science Scholars (YESS) program during its inaugural summer; sat on hiring and admissions committees for YESS for several years; taught in the Saturday Science Program (SSP), which was a precursor to YESS; and taught in the Freshman Summer Institute (FSI) during his junior and senior years - after being in the program himself during his freshman year. Goins's commitment to the underrepresented student community extended to his academic life. He conducted independent research, under the tutelage of history professor Douglas Flamming,

on the history of the Black students at Caltech. This work was presented in the student publication, the California Tech, in a series of ten articles published during the Winter Term of the 1993-1994 academic year. Goins received many accolades for his service to the Caltech campus. He received the Dean's Cup during his junior year, and became a member of the Gnome Club during his senior year. The history department awarded Goins the Rodman Paul prize in 1994. In 2004, the Office of Minority Student Education (MSE) created an annual award in his honor to be given to alumni who are dedicated to creating a welcoming atmosphere for underrepresented students.

Academic Career. Goins has held positions at the world's premiere research institutions, including the National Security Agency in Ft. Meade, Maryland; the Mathematical Sciences Research Institute in Berkeley, California; the Institute for Advanced Study in Princeton, New Jersey; the Max Planck Institute for Mathematics in Bonn, Germany; Harvard University in Cambridge, Massachusetts; and the California Institute of Technology in Pasadena, California. In his career, Goins has published over 25 journal articles in areas such as Applied Mathematics, Graph Theory, Number Theory, and Representation Theory, as well as topics such as Diophantine equations, elliptic curves, and African Americans in mathematics. He has given nearly 250 invited addresses on his research, acted as a referee for nearly 20 different journals in mathematics, served on dozens of panels for the National Science Foundation (NSF), and been awarded more than $1,370,000 in external funding. Most recently, Goins was on the faculty at Purdue University in West Lafayette, Indiana from 2004 through 2018, where he rose through the ranks to become Professor of Mathematics in 2017. He was only the second African American to receive tenure in the Department of Mathematics, and one of two African Americans out of 300 professors in the College of Science at the Big Ten school.

Community Outreach. Goins is on the Board of Directors for several organizations: the 4S Education Foundation, a non-profit organization which seeks to prepare students for college admission through assistance with the application process, specifically through intensive instruction in writing and other communication skills; the Association of Members of the Institute for Advanced Study (AMIAS), an entity which focuses on welcoming new and incoming scholars to the Institute for Advanced Study, providing professional and social enrichment for current scholars and their families, and helping former scholars stay connected to the academic life of IAS; the Art of Problem Solving Initiative, Inc., a non-profit organization which seeks to help underserved students find a realistic pathway towards becoming scientists, mathematicians, engineers, and programmers; College Bridge, a non-profit organization which centers on intersegmental partnerships to bridge the gaps between K-12 and higher education; and the Institute for Pure and Applied Mathematics (IPAM), a federally funded institute which fosters the interaction of mathematics with a broad range of science and technology, builds new interdisciplinary research communities, promotes mathematical innovation, and engages and transforms the world through mathematics. Goins is also a Program Director for the African Diaspora Joint Mathematics Workshop (ADJOINT) at MSRI. Goins served as president of the National Association of Mathematicians, Inc., the nationwide organization of African Americans in Mathematics, from 2015-2020.

Mentoring. Goins has served on 30 doctoral thesis defense committees, and has mentored several doctoral students and postdoctoral fellows alike. Goins has been involved with many programs throughout the country to work with students from all levels. He has taught mathematics with the Vanguard Engineering Scholarship Program through the National Action Council for Minorities in Engineering (NACME); taught mathematics and physics in the Freshman Summer Institute (FSI) at Caltech; and led a research seminar in number theory in the Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI) at Miami University. He even taught high school for one year, working at Eastside College Preparatory High School in East Palo Alto, California. Goins currently runs a federally-funded Research Experience for Undergraduates (REU) titled Pomona Research in Mathematics Experience (PRiME). In his career, Goins has worked with nearly 100 undergraduates outside the traditional classroom.

Awards and Honors. In January 2004, Goins was featured in Black Issues in Higher Education as

one of the "2004 Emerging Scholars of the Year." The issue featured nine "young educators bring[ing] their passion and excitement for teaching, research, and training to the forefront of the academy." In 2011, he received the Ruth and Joel Spira Teaching Award from the Department of Mathematics at Purdue University for his excellence in Mentoring and Undergraduate Teaching. In January 2019, he was named a Fellow of the Association of Women in Mathematics (AWM) for his "outstanding leadership in the mathematics community; for his efforts and success in making the community more fair and diverse; for inspiring and mentoring many individuals; and for his significant research in number theory." In May 2019, Goins received an Honorary Doctor of Humane Letters (LHD) from the Cooper Union for the Advancement of Science and Art.

New York Times. Goins caused quite a stir when he wrote a blog in September 2017 for the American Mathematical Society (AMS) titled "Why I'm leaving a Research I University for a Liberal Arts College." In this essay, Goins outlined his reasons for leaving his tenured position at Purdue University after 14 years in favor of Pomona College. He discussed how isolation – both academic and social – led him to rethink his career trajectory. This blog was picked up by the New York Times, where Goins's story was featured in more detail. The February 2019 front-page article titled "For a Black Mathematician, What It's Like to Be the 'Only One'" and its follow-up article titled "What I Learned While Reporting on the Dearth of Black Mathematicians" featured Goins's struggles with the mathematical community and his efforts to make it more inclusive.

Curriculum Vitae last updated on December 21, 2022.