

# Naiomi T. Cameron

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## EDUCATION

- Ph.D., Howard University, Washington, DC, 2002.
- B.S., Mathematics, Howard University, Washington, DC, 1995.

## RESEARCH INTERESTS

- Enumerative and Algebraic Combinatorics

## EMPLOYMENT

- *Professor*, Department of Mathematics, Spelman College, Atlanta, GA, 2020–present.
- *Associate Professor*, Department of Mathematics, Spelman College, Atlanta, GA, 2019–2020.  
Courses: Precalculus, Accelerated Precalculus, Introductory Seminar, Foundations of Mathematics, Linear Algebra II, Senior Seminar.
- *Associate Dean for Faculty Development*, College of Arts & Sciences, Lewis & Clark College, Portland, OR, 2017–present.  
Duties include organizing new faculty orientation, new chairs orientation and mentoring programs for junior faculty; coordinating teaching and research programs of interest to faculty; overseeing travel and research grant programs sponsored by the Dean’s office; serving as Research Integrity Officer; ex officio committee service on college wide committees including Budget Advisory Committee, Budget Managers and Faculty Council.
- *Associate Professor*, Department of Mathematical Sciences, Lewis & Clark College, Portland, OR, 2012–present.  
Courses: Perspectives in Mathematics, Elementary Functions, Calculus (Single and Multivariable), Discrete Mathematics, Combinatorics, Linear Algebra, Number Theory, Exploration and Discovery (Core Writing Course for First Year Students)
- *Visiting Fellow, Mathematics*, Natural Sciences Division, Pepperdine University, Spring 2014.  
Courses: Business Calculus
- *Director*, Math Skills Center (now Symbolic & Quantitative Resource Center), Lewis & Clark College, 2011–2012.  
Duties include hiring, training, scheduling and supervising students to work as peer tutors for the drop-in tutoring services provided by the Center; approving student hours; coordinating Center hours, personnel and services with mathematics and other quantitatively oriented courses on campus.
- *Assistant Professor*, Department of Mathematical Sciences, Lewis & Clark College, Portland, OR, 2006–2012.  
Courses: Calculus (Single and Multivariable), Differential Equations, Discrete Mathematics, Combinatorics, Abstract Algebra, Linear Algebra, Number Theory, Perspectives in Statistics, Exploration and Discovery (Core Writing Course for First Year Students)

- *Assistant Professor*, Department of Mathematics, Occidental College, Los Angeles, CA, 2003-2005.  
Courses: Calculus 1 and 2, Real Analysis
- *Visiting Assistant Professor*, Department of Mathematics, Harvey Mudd College, Claremont, CA, 2002-2003.  
Courses: Discrete Mathematics, Multivariable Calculus, Linear Algebra, Graph Theory
- *Instructor*, Department of Mathematics, Montgomery College, Rockville, MD, 2000.  
Courses: Intermediate Algebra
- *Teaching Assistant*, Department of Mathematics, Howard University, Washington, DC, 1998-2002.
- *Graduate Intern*, Applied Mathematics Group, Sandia National Laboratories, Albuquerque, NM, 1999.
- *Mathematics Teacher*, Thomas J. Pullen Arts Magnet, Landover, MD, 1997-1998.  
Courses: Middle Grades Mathematics, Grades 6-7
- *Teaching Assistant*, Department of Mathematics, University of Maryland, College Park, MD, 1996-1997.

## PUBLICATIONS

(\* indicates a co-author who was an undergraduate at the time of the collaboration)

- N. Cameron, K. Killpatrick, Statistics on linear chord diagrams, *Discrete Mathematics & Theoretical Computer Sciences*, 21 (2020), no. 2, Permutation Patterns 2018.
- N. Cameron, M. Kemp\*, S. Maslak\*, G. Melamed\*, R. Moy, J. Pham\* and A. Wei\*, Shabat polynomials and monodromy groups of trees uniquely determined by ramification type, *INVOLVE, a Journal of Mathematics*, 12:5 (2019), [dx.doi.org/10.2140/involve.2019.12.791](https://doi.org/10.2140/involve.2019.12.791).
- N. Cameron, K. Killpatrick, Inversion generating functions for signed pattern avoiding permutations, *Electronic Journal of Combinatorics*, 24(1) (2017), #P1.39.
- N. Cameron, J. McLeod, Returns and hills on generalized Dyck paths, *Journal of Integer Sequences*, 19 (2016), Article 16.6.1.
- N. Cameron, K. Killpatrick, Inversion polynomials for permutations avoiding consecutive patterns, *Advances in Applied Mathematics* 67 (2015), 20–35.
- N. Cameron, L. Matthews, A Motzkin variation on the tennis ball problem, *Ars Combinatoria* 114 (2014), 145–152.
- N. Cameron, K. Killpatrick, Symmetry and log-concavity results for statistics on Fibonacci tableaux, *Annals of Combinatorics*, 17 (2013), no. 4, 603-618.
- N. Cameron, A. Yip\*, Hankel determinants of sums of consecutive Motzkin numbers, *Linear Algebra and its Applications*, 434 (2011), 712–722.
- A. Benjamin, N. Cameron, J. Quinn, C. Yerger\*, Catalan determinants—a combinatorial approach, *Congressus Numerantium*, Proceedings of the Twelfth Conference on Fibonacci Numbers and their Application, Vol. 200 (2010), 169–177.
- N. Cameron, K. Killpatrick,  $k$ -ribbon Fibonacci tableaux, *Discrete Mathematics*, 309 (2009), no. 4, 721–740.
- A. Benjamin, N. Cameron, J. Quinn, Fibonacci determinants—a combinatorial approach, *The Fibonacci Quarterly*, 45.1 (2007), 39-55.

- N. Cameron, K. Killpatrick, Domino Fibonacci tableaux, *Electronic Journal of Combinatorics*, 13 (2006), no. 1, Research Paper 45, 29 pp.
- A. Benjamin, N. Cameron, Counting on determinants, *Amer. Math. Monthly*, 112 (2005), 481–492.
- N. Cameron, A. Nkwanta, Elements of pseudo-order two in the Riordan group, *Journal of Integer Sequences*, Vol. 8 (2005), Issue 3, Article 05.3.7.
- N. Cameron, The combinatorics of even trees, *Congressus Numerantium*, 117 (2000), 129-143.

## RECENT PRESENTATIONS

- SPIRAL Summer REU Program (Virtual), “An Introduction to Counting,” American University, Washington, DC, July 2, 2020.
- Wellesley Summer Research Program (Virtual), “How I Learned to Count: A Story of Mathematical Persistence,” Wellesley College, Wellesley, MA, July 1, 2020.
- Howard University Mathematics Department Colloquium, “A Sign-Reversing Involution on Peakless Motzkin Paths,” Howard University, Washington, DC, February 28, 2020.
- STEM Careers Pathways Outreach Program, “How I Learned to Count,” Portland Community College, Southeast Campus, Portland, OR, April 11, 2019.
- AMS Special Session on Riordan Arrays, “Riordan Group Techniques on Linear Chord Statistics,” Joint Mathematics Meeting, Baltimore, MD, January 16–19, 2019.
- Reed College Mathematics Colloquium, Reed College, Portland, OR, October 11, 2018.
- Iowa State Mathematics Colloquium, Iowa State University, Ames, IA, October 9, 2018.
- MathPath program (advanced summer program for students age 11-14), Plenary speaker, Lewis & Clark College, July 27, 2018.
- Lewis & Clark Mathematics Colloquium, “Becoming a Math Professor,” Department of Mathematical Sciences, Lewis & Clark College, April 13, 2017.
- Oregon Eta Pi Mu Epsilon Induction Ceremony, Keynote speaker, Lewis & Clark College, November 30, 2017.
- Willamette University Mathematics Colloquium, Willamette University, Salem, OR, March 23, 2017.
- Connecticut College Mathematics Seminar, Connecticut College, New London, CT, March 9, 2017.
- Purdue University Automorphic Forms and Representation Theory Seminar, Purdue University, West Lafayette, IN, February 16, 2017.
- *Algebra: Much More than Arithmetic*, Invited Paper Session, The National Diversity in STEM Conference, SACNAS, Long Beach, CA, October 14, 2016.
- MAA Invited Paper Session on Undergraduate Research Projects in the Mathematical Sciences, MAA MathFest, Columbus, OH, August 5-6, 2016.
- 14th International Permutation Patterns Conference, Howard University, Washington, DC, June 27–July 1, 2016.
- USCGA Mathematics Department Colloquium, U.S. Coast Guard Academy, New London, CT, January 15, 2016.
- Modern Math Workshop, Sponsored by the Mathematical Institutes, Washington, DC, October 28, 2015.

- Second International Symposium on Riordan Arrays and Related Topics, Politenico di Milano, Lecco, IT, July 14, 2015.
- 21st Annual Conference for African American Researchers in the Mathematics Sciences (CAARMS), Institute for Computational and Experimental Research in Mathematics (ICERM), Brown University, Providence, RI, June 24, 2015.
- Oregon State Number Theory Seminar, Department of Mathematics, Oregon State University, Corvallis, OR, October 28, 2014.
- Pacific University Mathematics Department Colloquium, Pacific University, Forest Grove, OR, October 27, 2014.
- STEM Career Pathways Series, Portland Community College, Southeast Campus, Portland, OR, October 9, 2014.
- 12th International Permutation Patterns Conference, East Tennessee State University, Johnson City, TN, July 7–11 2014.
- Pepperdine Natural Sciences Division Seminar, Pepperdine University, Malibu, CA, March 4, 2014.
- MAA General Contributed Paper Session on Research in Graph Theory and Combinatorics, II, Joint Mathematics Meeting, Baltimore, MD, January 16, 2014.

## RECENT COLLEGE AND PROFESSIONAL SERVICE

- Member, Internal Steering Committee, Center of Excellence for Minority Women in STEM (COE-MWS), Spelman College, 2020–present.
- Co-Director & 2020 On-Site Director, The African Diaspora Joint Mathematics Workshop (ADJOINT), Mathematical Sciences Research Institute (MSRI), 2019–present.
- Search Committee Member, Director of Center of Excellence for Minority Women in STEM (COE-MWS), Spelman College, 2019–2020.
- Director, Mathematics Research and Mentoring Program (Math RaMP), Spelman College, 2019–present.
- Vice-President, National Association of Mathematicians, Inc., 2019–present.
- Search Committee Member, Vice President of Student Life and Dean of Students, Lewis & Clark College, Fall 2018.
- Steering Committee Member & Facilitator, NW5C Supporting Faculty of Color Workshop, Reed College, Portland, OR, June 4–6, 2018.
- Member, Search Committee for Assistant Director of Inclusion & Multicultural Engagement (IME) and International Students & Scholars (ISS), Lewis & Clark College, Portland, OR, May 2018.
- External Reviewer, Pacific University Mathematics Program Review, Pacific University, Forest Grove, OR, April 2–3, 2018.
- Co-organizer, “Implicit Bias & its Effects in Mathematics,” MAA panel co-sponsored by Committee on the Participation of Women in Mathematics, Joint Committee on Women in Mathematics, Committee on Minority Participation in Mathematics, National Association of Mathematicians and Association for Women in Mathematics, Joint Mathematics Meeting, San Diego, CA, January 10, 2018.
- Faculty Mentor, Willamette Mathematics Consortium REU, Willamette University, Salem, OR, June 12–August 4, 2017.

- Instructor, Enhancing Diversity in Graduate Education (EDGE) Program, Mills College, Oakland, CA, June 5–June 9, 2017.
- Consultant, Sherman Fairchild Foundation, 2016–present.
- Association of Women in Mathematics (AWM) Representative on the Committee on the Participation of Women (CPW), August 11, 2016–February 1, 2019.
- Faculty Mentor, LC Early Research Internship Program, Lewis & Clark College, Spring 2016.
- Mentor, Association of Women in Mathematics (AWM) Workshop Lunch & Mentoring/Networking Session, Joint Mathematics Meetings, Seattle, WA, January 8-9, 2016.
- Panelist, *How to Build A Sustainable Research Program*, Infinite Possibilities Conference, March 2015.
- Faculty Mentor, Willamette Valley REU-RET Consortium for Mathematics Research, Lewis & Clark College, June-July, 2014.
- Member, LC Committee on Promotion and Tenure, 2014-2016.
- Chair, LC Search Advisory Committee for the Dean of College of Arts and Sciences, 2014-15.
- Reviewer, 2013 Ford Foundation Fellowships Program, Beckman Center of the National Academies, Irvine, CA, March 4-5, 2013.
- Chair, LC Budget Advisory Committee, 2011-2013.
- Organizer, Northwest Undergraduate Mathematics Symposium (NUMS), March 2012.

## OTHER PROFESSIONAL DEVELOPMENT

- HERS Institute for Women’s Leadership Development, Bryn Mawr College, Bryn Mawr, PA, July 8–12, 2018.
- Sherman Fairchild Foundation Pilot Bridge Conference, Lewis & Clark College, Portland, OR, June 10–12, 2018.
- Northwest Five Consortium Faculty Workshop, Supporting Faculty of Color at Liberal Arts Institutions
  - Reed College, June 4–6, 2018.
  - University of Puget Sound, June 6–8, 2016.
  - Whitman College, June 3–5, 2015.
  - Lewis & Clark College, Portland, OR, June 4–6, 2014.
- American Institute of Mathematics (AIM) SQuaREs Meeting, Palo Alto, CA, March 2014.
- AIM Research Experiences for Undergraduate Faculty (REUF) Workshop, Institute for Computational and Experimental Research in Mathematics, Providence, RI, June 2012.

## GRANTS & AWARDS

- Mathematical Association of America (MAA) Tensor Women and Mathematics Program, Math RaMP (Research and Mentoring Program), 2020–2021.
- Boeing Thurgood Marshall College Fund HBCU Investment Capacity Grant, Math RaMP (Research and Mentoring Program), 2020–2021.
- HERS-CBL Scholarship Recipient, Henry Luce Foundation Grant for Women’s Leadership in STEM, Spring–Summer 2018.

- Association for Women in Mathematics (AWM) Travel Grant Award, Spring 2014.
- NSF-MAA regional conference grant for Northwest Undergraduate Mathematics Symposium (NUMS), NSF grant DMS-0846477, June 2011.
- Association for Women in Mathematics (AWM) Travel Grant Award, Fall 2010.
- Career Enhancement Fellowship for Junior Faculty, Woodrow Wilson National Fellowship Foundation & Andrew W. Mellon Foundation, 2009–2010.

## **PROFESSIONAL MEMBERSHIPS**

- Mathematical Association of America
- National Association of Mathematicians
- Association for Women in Mathematics
- Pi Mu Epsilon