

AMY N. MYERS

Department of Mathematics
Bryn Mawr College
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EDUCATION

- 1994 - 1999 **Dartmouth College** Hanover, NH
Ph.D. in Mathematics, June 1999
Major Area: Combinatorics
Thesis Advisor: Kenneth P. Bogart

M.A. in Mathematics, June 1996
- 1990 - 1994 **St. Olaf College** Northfield, MN
B.A. in Mathematics, June 1994
Awarded Phi Beta Kappa, Magna Cum Laude, and
Department of Mathematics Honors

TEACHING EXPERIENCE

- 2015 - 2020 **Senior Lecturer in Mathematics** Bryn Mawr College
- 2007 - 2015 **Lecturer in Mathematics** Bryn Mawr College
Taught single-variable calculus, multivariable calculus, linear algebra,
statistics, probability, combinatorics, and the history of mathematics.
Led a seminar focused on writing and critical thinking for first-year
students. Supervised independent studies on the applications of
probability theory and the history of mathematics.
- 2002 - 2007 **Assistant Professor of Mathematics** St. Joseph's University
Taught undergraduate courses in calculus, statistics, contemporary
mathematics, complex analysis, and combinatorics; and graduate
courses in mathematics education, discrete structures, and the history
of mathematics.
- 1999 - 2002 **Lecturer in Mathematics** University of Pennsylvania
Taught contemporary mathematics, linear algebra, graph theory,
abstract algebra, differential equations, and vector calculus to
undergraduate students; and combinatorics to graduate students.

- 1997 - 1999 **Lecturer in Mathematics** Dartmouth College
 Taught one finite mathematics and two statistics courses.
- 1996 **Teaching Seminar** Dartmouth College
 Explored the various ways students learn mathematics, and experimented with teaching techniques designed to address different learning styles. Guest taught Dartmouth undergraduate classes, ran a course in complex analysis for graduate students, and led a week-long program in mathematics for high school women.
- 1994 - 1996 **Teaching Assistant** Dartmouth College
 Facilitated tutorial sessions and graded exams for two first-semester calculus courses, one multivariable calculus course, and one statistics course. Met with first-semester calculus students to monitor progress on group projects exploring the applications of calculus.
- 1994 **Computer Lab Monitor** University of Texas
 Assisted junior-high and high-school students with computer programming projects as part of the Pre-Freshmen Engineering Program for disadvantaged students in San Antonio.
- 1993 - 1994 **Computer Lab Monitor** St. Olaf College
 Assisted college students with Scheme and C++ programming assignments.

PROFESSIONAL DEVELOPMENT

- 2020 **Online Teaching Institute** Bryn Mawr, PA
 Learned about planning for, successfully delivering, and creating community in online courses. Read chapters and articles offline, and watched technology demonstrations online.
- 2020 **LACOL Virtual Workshop** Bryn Mawr, PA
 Attended webinars designed to introduce faculty to ways of envisioning and implementing online courses.
- 2020 **Statistics for Data Science Workshop** Denver, CO
 Attended a four-hour MAA-sponsored workshop on teaching introductory statistics for data science.
- 2018 - 2020 **DEI Conversations** Bryn Mawr, PA
 Participated in campus book clubs and discussion groups dedicated to understanding and acting to promote diversity, equity, and inclusion. Groups include Showing Up White, the Campaign for Anti-Racist Literacy at Bryn Mawr (CARLA), Moving Forward Together conversations, and a math department reading group.

- 2015 - 2020 **DEI Events** Bryn Mawr, PA
 Participated in Community Days of Learning, the Posse Plus Retreat, and workshops for faculty to engage with issues surrounding diversity, equity, and inclusion on campus.
- 2019 **Workshop on Permutation Patterns** Universität Zürich
 Attended a three-day pre-conference workshop with the goal of learning the background material relevant to recent advances in a research area in which I was formally active.
- 2017 **Computer Graphics Workshop** Atlanta, GA
 Attended a four-hour MAA-sponsored workshop on the mathematics of computer graphics.
- 2016 **Active Learning Strategies Workshop** Seattle, WA
 Attended a four-hour MAA-sponsored workshop on increasing student engagement by means of active learning strategies.
- 2015 **Access to Learning Workshop** Haverford, PA
 Attended a half-day workshop on universal design for learning.
- 2015 **Health Care Applications Workshop** San Antonio, TX
 Attended a four-hour MAA-sponsored workshop on including applications to health care in introductory mathematics course.
- 2014 **Technology Workshop** Bryn Mawr, PA
 Attended a short workshop on writing on screen and creating quizzes in *Moodle*.
- 2013 **Social Explorer Pro Workshop** Bryn Mawr, PA
 Attended a short workshop on using software to explore census and demographic data.
- 2012 **Math and Dance Workshop** Boston, MA
 Attended a four-hour MAA-sponsored workshop on the connections between mathematics and dance.
- 2011 **Technology Workshop** Bryn Mawr, PA
 Attended a one-day workshop on blended learning and teaching with technology.
- 2011 **Linear Optimization Workshop** New Orleans, LA
 Attended a four-hour MAA-sponsored workshop on linear optimization and its place in the undergraduate curriculum.
- 2009 **Teaching and Learning Initiative** Bryn Mawr, PA
 Attended a semester-long weekly seminar and worked with a student consultant to improve a first-semester calculus course.
- 2009 **Thematic Calculus Workshop** Washington, DC
 Attended a four-hour MAA-sponsored workshop on teaching a conceptual single-variable calculus course.

- 2008 **AP Calculus Reading** Kansas City, MO
 Graded Advanced Placement BC calculus exams for the Educational Testing Service.
- 2008 **Combinatorics Workshop** San Diego, CA
 Attended a four-hour MAA-sponsored workshop on the history, present, and future of combinatorics.
- 2007 **AP Calculus Reading** Louisville, KY
 Graded Advanced Placement AB calculus exams for the Educational Testing Service.
- 2007 **Teaching Mathematics History Workshop** New Orleans, LA
 Attended a four-hour MAA-sponsored workshop designed to improve the teaching of mathematics history to students at all levels.
- 2006 **TA Training Workshop** San Antonio, TX
 Received funding to attend a one-day MAA-sponsored workshop that addressed the training of teaching assistants for undergraduate classrooms through the use of case studies.
- 2003 **Viewpoints Workshop** Lancaster, PA
 Received funding to attend a five-day workshop featuring classroom-tested activities and field trips which explored the connections between mathematics and art.
- 2002 **PREP Workshop** Pottsdam, NY
 Received funding to attend a two-week workshop designed to enhance participants' effectiveness in teaching undergraduate students who plan to teach mathematics in secondary school. Explored college-level mathematics content and pedagogy as it relates to secondary school, observed model classes for future teachers, and interacted with current secondary teachers and students.
- 2001 **AWM Workshop** New Orleans, LA
 Received funding to attend a three-day workshop for women who recently earned the Ph.D. degree.
- 1998 **Program in Mathematics and Molecular Biology** Berkeley, CA
 Received funding to attend a two-week workshop introducing the use of mathematics to solve problems in molecular biology.
- 1996 - 1997 **Mathematical Sciences Research Institute** Berkeley, CA
 Engaged in original research and attended seminars with a select group of mathematicians.
- 1997 **Tuck Business Bridge Program** Hanover, NH
 Received funding to attend a thirty-day program providing a rigorous introduction into accounting, finance, managerial economics, marketing and strategy through coursework emphasizing group process taught by MBA faculty at the Amos Tuck School of Business Administration.

- 1993 **Budapest Semesters in Mathematics** Budapest, Hungary
Engaged in a semester-long intensive study of mathematics combined with an introduction to the Hungarian language, history and culture.
- 1993 **Summer Mathematics Institute** Oakland, CA
Received funding to experience graduate-level mathematics with a select group of women undergraduates in an intensive six-week program at Mills College.

SERVICE

- 2007 - 2020 **Math Program Coordination** Bryn Mawr College
Supervised student leaders in the organization of math department events including excursions to regional conferences, math major information sessions, Math Appreciation Week activities, and other social events. Organized department presence at the Academic Fair, maintained math bulletin boards, and coordinated the bi-annual newsletter.
- 2007 - 2020 **Math Course Placement** Bryn Mawr College
Updated and maintained the mathematics placement system. Advised students, faculty, and deans concerning results.
- 2007 - 2020 **Math Student Employment** Bryn Mawr College
Hired students to grade homework, run problems sessions, monitor computer labs, and help with office work. Supervised teams of students in the organization of mini-courses to review high-school mathematics.
- 2019 - 2020 **Data Science Steering Committee** Bryn Mawr College
Participated in envisioning a new data science program for Bryn Mawr College.
- 2019 - 2020 **Search Committee** Bryn Mawr College
Served on a search committee for a Chemistry Lab Lecturer.
- 2012 - 2020 **BSM Council** St. Olaf College
Served as a consultant to the Budapest Semesters in Mathematics program.
- 2013 - 2020 **PAMTC Leadership Team** Philadelphia, PA
Helped coordinate monthly mathematics enrichment workshops for middle-school teachers as part of the Philadelphia Area Math Teachers' Circle.
- 2014 - 2020 **MAAGC Conference Organizing Committee** Drexel University
Helped coordinate annual one-day conferences on the connections between combinatorics and algebraic geometry. Organized a panel discussion for the (cancelled) conference in 2020.

2010 - 2019	Quantitative Reasoning Steering Committee Served on the search committee for, and provided guidance to, the Director of the Quantitative Center.	Bryn Mawr College
2008 - 2019	Faculty Advising Programs Participated in volunteer faculty advising and pilot programs.	Bryn Mawr College
2015 - 2018	Fellowships Committee Alternate Assisted the Fellowships Committee members when extra help was needed.	Bryn Mawr College
2016 - 2018	FIPSE Research Study Participated in a study on the efficacy of using online instructional modules to help students in introductory STEM courses review fundamental math concepts and skills.	Bryn Mawr College
2017 - 2018	STEM Open Houses Participated in panel discussions and information sessions for prospective STEM majors.	Bryn Mawr College
2012 - 2014	Fellowships Committee Interviewed students applying for external fellowships, and selected recipients for awards.	Bryn Mawr College
2014	Ph.D. Dissertation Committee	Drexel University
2013	Book Review for the <i>Princeton University Press</i> Reviewed <i>Zombies and Calculus</i> by Colin Adams.	Princeton, NJ
2012 - 2013	STEM Posse Committee Consulted with coordinators of the STEM Posse, and developed a math and physics lab for new scholars.	Bryn Mawr College
2010 - 2011	Search Committee Served on a search committee for an Assistant Professor of Mathematics.	Bryn Mawr College
2010 - 2011	Thinking Forward Committee Activities Participated in a fall faculty retreat and a spring working group.	Bryn Mawr College
2011	Ph.D. Qualifying Exam Committee	Drexel University
2010	Referee for the <i>Electronic Journal of Combinatorics</i>	
2010	Ph.D. Qualifying Exam Committee	Drexel University
2009	BSM Director Search Workshop Participated in a workshop intended to create a framework for the recruitment and selection of a new North American Director for the Budapest Semesters in Mathematics program.	Washington, DC

- 2009 **Book Contribution**
Acknowledged in *How to Guard an Art Gallery and Other Discrete Adventures* by T. S. Michael.
- 2009 **Referee for *Discrete Mathematics***
- 2006 **Referee for the *Journal of Applied Probability***
- 2006 **Referee for the *Electronic Journal of Combinatorics***
- 2006 **New Student Open Houses** St. Joseph's University
Organized two open houses for high-school students interested in studying mathematics or computer science.
- 2002 - 2006 **Career Night** St. Joseph's University
Organized a panel discussion and forum for informal conversation between mathematics and computer science students and alumni.
- 2002 - 2006 **High School Mathematics Day** St. Joseph's University
Designed and led a problem-solving contest as part of the Sonya Kovalevsky High School Mathematics Day for Philadelphia high school girls.
- 2005 - 2006 **Elections Committee** St. Joseph's University
Solicited nominations and ran elections for committees.
- 2005 - 2006 **Curricular Architecture Committee** St. Joseph's University
Conducted research and provided recommendations concerning curricular architecture as part of a comprehensive curriculum review.
- 2004 - 2005 **Career Development Center Advisory Committee** St. Joseph's University
Met with Career Development Center representatives to suggest ways to improve service for students majoring in math and computer science.
- 2005 **Panelist** University of Pennsylvania
Participated in a panel discussion for graduate students entitled "Interviewing and Working at Different Types of Institutions."
- 2005 **Referee for the *SIAM Journal on Discrete Mathematics***
- 2003 - 2004 **Exam and Dissertation Committees** Lehigh University
Served as a member of Ph.D. qualifying exam and doctoral dissertation committees.
- 2003 **Faculty and Staff Immersion Initiative in Bolivia** St. Joseph's University
Selected to travel to Jesuit schools in rural Bolivia and interact with local teachers, students, and supporters.
- 2002 **Referee for *Journal of Computer Science***
- 1999 - 2002 **Combinatorics Seminar** University of Pennsylvania
Invited speakers, coordinated talks, and publicized a weekly seminar at the University of Pennsylvania.

- 1999 - 2002 **Exam and Dissertation Committees** University of Pennsylvania
Served as a member of Ph.D. qualifying exam and dissertation committees.
- 1999 - 2002 **Transfer Credit Committee** University of Pennsylvania
Evaluated requests for transfer credit.
- 1997 - 1999 **International House Program Coordinator** Dartmouth College
Organized lectures, receptions, dinners, film screenings, and social gatherings for the international community. Lived in the International House on campus, and served as an informal advisor to house residents.
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GRANTS

- 2020 **Data Science Course Development Grant** Bryn Mawr College
Received funding to develop an introductory course on statistics for data science.
- 2018 **Mellon Faculty Forum Root Grant** Bryn Mawr College
Received funding to support the Philadelphia Area Math Teacher Circle.
- 2017 **Mellon Faculty Forum Seed Grant** Bryn Mawr College
Received funding to support the Philadelphia Area Math Teacher Circle.
- 2016 **Mellon Faculty Forum Seed Grant** Bryn Mawr College
Received funding to support the Philadelphia Area Math Teacher Circle.
- 2016 **Mellon Tri-Co Brainstorming Grant** Bryn Mawr College
Received funding to support the brainstorming of Tri-Co solutions to the problems posed by underprepared students in introductory math courses.
- 2015 **Mellon Faculty Forum Seed Grant** Bryn Mawr College
Received funding to support the Philadelphia Area Math Teacher Circle.
- 2012 **Mellon Creative Residencies Program** Bryn Mawr College
Received funding to host mathematician and dance choreographer Karl Schaffer of De Anza College and the Dr. Schaffer and Mr. Stern Dance Ensemble for a three-week residency exploring the connections between mathematics and dance.
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PUBLICATIONS

- A. Myers (2010), *Rollette*, *PMEJ* **13**, no. 3, 153–158.
- A. Myers (2009), *Forbidden Substrings on Weighted Alphabets*, *Australas. J. Combin.* **45**, 59–66.
- A. Myers (2009), *The List of Grievances and Special Requests*, *Focus* **29**, no. 2, 14–15.

- A. Myers and H. Wilf (2008), *Left-to-Right Maxima in Words and Multiset Permutations*, Israel J. Math. **166**, 167–184.
- A. Myers (2007), *Pattern Avoidance in Multisets: Bijective Proof*, Ann. Comb. **11**, no. 3–4, 507–517.
- A. Myers and H. Wilf (2006), *Some New Aspects of the Coupon Collector Problem*, SIREV **38**, no. 3, 549–565.
- A. Myers and H. Wilf (2003), *Some New Aspects of the Coupon Collector Problem*, SIAM J. Discrete Math. **1**, 1–17.
- A. Myers (2002), *Counting Permutations by their Rigid Patterns*, J. Combin. Theory Ser. A **99**, 345–357.
- A. Myers (2000), *Basic Interval Orders*, Order **16**, 261–275.
- L. Billera and A. Myers (1999), *Shellability of Interval Orders*, Order **15**, 113–117.
- A. Myers (1994), *Magyar Mathematics*, UME Trends.

PRESENTATIONS

- 2018 *Apollonian Gaskets*, Philadelphia Area Math Teachers Circle.
- 2018 *Liar's Bingo*, Philadelphia Area Math Teachers Circle.
- 2016 *Triangle in a Triangle*, Philadelphia Area Math Teachers Circle.
- 2015 *The Mathematics of the Simplex Lock*, Philadelphia Area Math Teachers Circle.
- 2014 *Coke versus Pepsi*, Philadelphia Area Math Teachers Circle.
- 2013 *Bad Squares on Board Games*, Philadelphia Area Math Teachers Circle.
- 2012 *Are Venn Diagrams Limited to Three or Fewer Sets?*, Philadelphia Area Math Teachers Circle (invited).
- 2010 *Teaching Introductory College Mathematics Courses*, Renyi Institute of Mathematics.
- 2008 *Parents Weekend Lecture*, Bryn Mawr College (invited).
- The Outstanding Elements of Permutations and Words*, Haverford College (invited).
- 2006 *Pattern Avoidance for Multiset Permutations*, University of Miami (invited).
- 2005 *Bad Squares on Board Games*, Joint Mathematics Meetings.
- Bad Squares on Board Games*, Budapest Semesters in Mathematics Reunion Conference.
- 2004 *Composition Avoidance and The Coupon Collector Problem*, Iran IASBS (invited).
- Composition Avoidance*, Bryn Mawr College (invited).
- 2003 *The Coupon Collector Problem*, Gettysburg College (invited).
- The Coupon Collector Problem*, Swarthmore College (invited).

- Bad Squares on Board Games*, St. Joseph's University (invited).
- 2002 *Binomial Determinants, Lattice Paths, and Hook Length Formulae*, University of Pennsylvania.
- 2001 *Counting Permutations by their Rigid Patterns*, Association for Women in Mathematics Workshop (invited).
Counting Permutations by their Rigid Patterns, Lehigh University (invited).
Broken Circuit Complexes, University of Pennsylvania.
Counting Permutations by their Rigid Patterns, Vanderbilt University.
- 2000 *Counting Permutations by their Rigid Patterns*, U.S. Naval Academy (invited).
Rigid Patterns, 32nd Annual Congress on Combinatorics, Graph Theory and Computing.
Rigid Patterns, Combinatorialists of New England Conference (invited).
Rigid Patterns, George Washington University (invited).
Basic Interval Orders, Massachusetts Institute of Technology (invited).
Basic Interval Orders, University of Pennsylvania.
- 1999 *Interval Orders are Shellable*, 31st Annual Congress on Combinatorics, Graph Theory and Computing.
Combinatorial Topology, Dartmouth College.
Topology of Interval Orders, University of Pennsylvania.
- 1997 *Paper Folding and Prime Numbers*, University of California at Berkeley (invited).