

Education

Bryn Mawr College
Bryn Mawr, PA

Doctor of Philosophy, Mathematics 2010 { Present

Advisor: Paul Melvin

Dissertation:

Slice Implies Mutant Ribbon for Odd, 5-Stranded Pretzel Knots

Comprehensive examination topics: Algebra, Analysis, & Topology

Master of Arts, Mathematics 2010{2013

Advisor: Paul Melvin

Thesis:

Lens Spaces: Constructions, Classification, and Mapping Class Groups

Northern Arizona University
Flagstaff, AZ

Bachelor of Science, Mathematics 2005 { 2010

Graduated Magna Cum Laude with honors

3.72 GPA (4.0 scale) in Mathematics; 3.86 GPA overall

Active member of the Chi Omega Fraternity and NAU Math Club

Bachelor of Arts, Spanish 2005 { 2010

Graduated Cum Laude with honors

4.0 GPA in Spanish (4.0 scale)

Studied at the Universidad del Valle de Guatemala

Guatemala City, Guatemala, June - Dec. 2007

Awards, Grants & Honors

Dean's Fellowship	2015 - 16
Carland Prize for Teaching Excellence	2014 - 15
Nora M. and Patrick J. Healy Fund Scholar	2013 - 14
Mathematics Research Fellowship, Bryn Mawr College	2012 - 13
Bryn Mawr College Tuition Scholarship	2010 - 15
J. Harvey Butchart Achievement in Mathematics Scholarship	2009 - 10
Stuart E. Little Mathematics Education Scholarship	2008 - 09
Merit Tuition Scholarship, NAU	2005 - 09

Papers

Kathryn A. Bryant, *Slice Implies Mutant Ribbon for Odd, 5-Stranded Pretzel Knots*, preprint: arXiv:1511.07009.

Kathryn A. Bryant and Paul Melvin, *Montesinos Knots and De nite Plumbings*, in preparation.

Research Presentations

- | | |
|--|----------------|
| Sliceness and Mutation in Odd Pretzel Knots
Joint Mathematics Meetings
AMS & MAA, <i>Seattle, WA</i> | January 2016 |
| Determining Sliceness in Odd, 5-Stranded Pretzel Knots
Knots in Washington Conference
George Washington University, <i>Washington, D.C.</i> | December 2015 |
| Sliceness in Odd Pretzel Knots
Philadelphia Area Contact/Topology (PACT) Seminar
Bryn Mawr College, <i>Bryn Mawr, PA</i> | October 2015 |
| Revolutionary Results in 4 - Manifold Topology
Philadelphia Area Contact/Topology (PACT) Seminar
Bryn Mawr College, <i>Bryn Mawr, PA</i> | October 2015 |
| Why We Love Smooth, De nite 4 - Manifolds
Temple University Graduation Student Seminar
Temple University, <i>Philadelphia, PA</i> | October 2015 |
| Obstructing Sliceness in 5-Stranded Pretzel Knots
Graduate Student Conference in Algebra, Geometry, and Topology
Temple University, <i>Philadelphia, PA</i> | May 2015 |
| Lens Spaces: Constructions & Classifications (4-Talk Series)
Philadelphia Area Contact/Topology (PACT) Seminar
Bryn Mawr College, <i>Bryn Mawr, PA</i> | Feb { Mar 2013 |
| Recent Developments in Numerical Semigroups
Nebraska Conference for Undergraduate Women in Mathematics
University of Nebraska Lincoln, <i>Lincoln, NE</i> | January 2010 |
| Recent Developments in Numerical Semigroups
Southwestern Undergraduate Mathematics Research Conference
University of Texas El Paso, <i>El Paso, TX</i> | March 2010 |
| Introduction to Numerical Semigroups
Southwestern Undergraduate Mathematics Research Conference
University of New Mexico, <i>Albuquerque, NM</i> | February 2009 |

Funded Participation in Conferences and Workshops

Joint Mathematics Meetings
AMS & MAA, *Seattle, WA*

January 2016

Knots in Washington XLI
George Washington University, *Washington, D.C.*

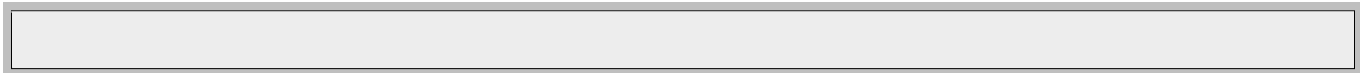
December 2015

Temple University Graduate Student Conference
Temple University, *Philadelphia, PA*

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May 2015

Association for Women in



Teaching Assistant, Bryn Mawr College

2010 { 2015

Abstract Algebra I & II
 Real Analysis I & II
 Transitions to Higher Mathematics
 Probability and Combinatorics
 Differential Equations
 Multivariable Calculus

Tutor, Inspirica

2012 { Present

SAT and ACT Prep
 College Calculus and Precalculus
 High school math and Spanish (all levels)

Teaching Assistant, Center for Talented Youth, Johns Hopkins University

2014

Class: Mathematical Logic

Private Tutor

2004 { 2013

Pre-algebra, Algebra I, Algebra II, College Algebra
 Euclidean Geometry
 Precalculus, Calculus I, Calculus II, Multivariable Calculus

Service**Graduate Group in Sciences and Math Co-Chair**

Jan 2014 { Aug 2015

Graduate Student Association Mathematics Representative

Aug 2011 { Aug 2013

Bryn Mawr College Budget Committee Representative

Distressing Math Collective Speaker

Nets for Topology Feb 2011
 Uncovering Covering Spaces Jan 2012
 The Glorious Torus Sept 2012
 Calculus Monsters: Everywhere-continuous, Nowhere-differentiable functions Feb 2013
 Parrondo's Paradox Dec 2014

Temple Math Circle

March 2014

Activity: Tilings in the Plane

Computer Skills

Programming Languages

{ Experienced with \LaTeX

{ Familiar with Mathematica, HTML, CSS, JavaScript, Python, and R