

**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

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

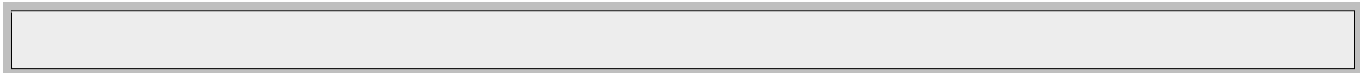
December 2015

**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  $\text{\LaTeX}$

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