Kathryn Bryant

Department of Mathematics Bryn Mawr College Fall 2015 kbryant01@brynmawr.edu *Bryn Mawr, Pennsylvania*

Education

Bryn	Mawr	Col	lege
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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, Classi cation, and Mapping Class Groups

Northern Arizona University

Flagsta , 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 Scholarshin, NAT	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, Seattle, WA	January 2016
Determining Sliceness in Odd, 5-Stranded Pretzel Knots Knots in Washington Conference George Washington University, <i>Washington</i> , <i>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, Bryn Mawr, PA	October 2015
Why We Love Smooth, De nite 4 - Manifolds Temple University Graduation Student Seminar Temple University, <i>Philadelphia</i> , <i>PA</i>	October 2015
Obstructing Sliceness in 5-Stranded Pretzel Knots Graduate Student Conference in Algebra, Geometry, and Topology Temple University, <i>Philadelphia</i> , <i>PA</i>	May 2015
Lens Spaces: Constructions & Classi cations (4-Talk Series) Philadelphia Area Contact/Topology (PACT) Seminar Bryn Mawr College, Bryn Mawr, PA	Feb { Mar 2013
Recent Developments in Numerical Semigroups Nebraska Conference for Undergraduate Women in Mathematics University of Nebraska Lincoln, Lincoln, NE	January 2010
Recent Developments in Numerical Semigroups Southwestern Undergraduate Mathematics Research Conference University of Texas El Paso, El Paso, TX	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

December 2015

George Washington University, Washington, D.C.

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

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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

Di erential 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-di erentiable 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