

Contact Information

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University of Kentucky
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Education

Ph.D. Mathematics

University of Kentucky, Lexington, KY, expected May 2015
Advisor: Heide Gluesing-Luerssen

M.A. Mathematics

University of Kentucky, Lexington, KY, August 2011

B.S., Mathematics and Classical Studies, with high honors, *magna cum laude*

College of William and Mary, Williamsburg, VA, May 2009

Teaching Experience

Teaching Assistant, University of Kentucky August 2009-present

- Primary Instructor
 - MA 112 - Trigonometry, Spring 2014
 - MA 202 - Math for Elementary School Teachers, Spring 2013
 - MA 110 - Algebra and Trigonometry for Calculus, Fall 2012
 - MA 201 - Math for Elementary School Teachers, Spring 2012
 - MA 111 - Intro to Contemporary Mathematics, Fall 2011
 - MA 113 - Calculus I, Summer 2011
- Recitation Instructor
 - MA 213 - Calculus III, Fall 2014
 - MA 123 - Elementary Calculus and its Applications, Fall 2013
 - MA 114 - Calculus II, MathExcel, Spring 2011
 - MA 113 - Calculus I, MathExcel, Fall 2010
 - MA 162 - Finite Mathematics and Its Applications, Spring 2010
 - MA 110 - Analytic Geometry and Trigonometry, Fall 2009

Research Interests

Algebraic coding theory, particularly random network coding and subspace codes.

Publications

(with H. Gluesing-Luerssen and K. Morrison) Cyclic Orbit Codes and Stabilizer Subfields.
To appear in *Advances in Mathematics of Communications*. Preprint 2014. arXiv:1403.1218.

Presentations

(Invited talk) A linkage Construction for Subspace Codes, Joint Math Meeting, to be given January 2015

(Poster) Irreducible Cyclic Orbit Codes, Midwest Women in Mathematics Symposium, University of Notre Dame, April 2014

(Invited talk) Irreducible Cyclic Orbit Codes, AMS Sectional Meeting, University of Louisville, October 2013

Cyclic Orbit Codes: An Introduction to Network Coding, Graduate Student Combinatorics Conference, University of Minnesota, April 2013

Cyclic Subspace Codes and Orbit Codes, University of Kentucky, Qualifying Talk, August 2012

MRD and Subspace Codes, University of Kentucky, Master Talk, June 2011

Conferences Attended

2nd Annual Midwest Women in Mathematics Symposium, University of Notre Dame, April 2014

AMS Sectional Meeting, University of Louisville, October 2013

Graduate Student Combinatorics Conference, University of Minnesota, April 2013

Careers for Women in Mathematics, Institute for Mathematics and its Applications, March 2013

AMS Sectional Meeting, University of Akron, Fall 2012

Spring Opportunities, Mathematical Sciences Research Institute, March 2012

AMS Sectional Meeting, University of Kentucky, Spring 2010

Center of Undergraduate Research Conference, Brigham Young University, March 2008

Awards and Fellowships

Edgar Enochs Algebra Scholarship, May 2014

Van Meter Fellowship, Department of Mathematics, University of Kentucky, August 2009 - May 2012

Graduate Fellowship for Selected Areas, University of Kentucky, Spring 2010

Phi Beta Kappa, Alpha of Virginia, College of William and Mary, inducted Fall 2008

University Service

Technology Coordinator, Planning Committee, 2015 Graduate Student Combinatorics Conference at University of Kentucky, May 2014 - present

Secretary, Association for Women in Mathematics Student Chapter, University of Kentucky, May 2014 - present

President, Association for Women in Mathematics Student Chapter, University of Kentucky, May 2013 - May 2014

Treasurer, Association for Women in Mathematics Student Chapter, University of Kentucky, May 2012 - May 2013

Co-Chair for Graduate Student Colloquium, University of Kentucky, Spring 2012

Graduate Student Congress Steering Committee, Member, University of Kentucky, Spring 2012

Panelist for MA 601 - Teaching College Mathematics, Department of Mathematics, University of Kentucky, November 2011

Graduate Student Council, Social Chair, Department of Mathematics, University of Kentucky, 2009-2010

Outreach

High School Math Day, November 2014

Monster Math Night, Tates Creek Elementary School, October 2012

Innovate Kentucky Podcast Interview, on Math Circles, September 2012

Tates Creek Elementary School Math Circle, March-April 2012

Girls Excited about Math and Science, November 2011

High School Math Circle, February 2011

High School Math Day, October 2010

Professional Memberships

Association for Women in Mathematics

American Mathematics Society

Society for Industrial and Applied Mathematics