

Born September 10, 1981 in Charleston, Illinois

Citizenship: United States

Contact Information

Department of Mathematics

University of Georgia

Athens, GA 30606

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Education

2003 B.A. Mathematics Taylor University, magna cum laude

2005 M.S. Mathematics University of Georgia

Ph.D. Mathematics University of Georgia (anticipated May 2008)

Thesis Advisor: Daniel K. Nakano

Thesis Title: Support Varieties of Tilting Modules

Research Interests/AMS 1991 Subject Classification

Representation/Cohomology Theory of Lie Algebras and Algebraic Groups-17B, 20G, 20J

Fellowships/Assistantships

2003–2006 VIGRE Research Assistantship, University of Georgia

2004 Teaching Assistantship, University of Georgia

2007 Dissertation Completion Award, University of Georgia

Academic Honors/Awards/Recognition

2003 Senior Mathematics Award, Taylor University

2005 William Armor Wills Memorial Scholarship Award, University of Georgia

Other Research Experience

2002 Summer REU at Oregon State University

2003–08 UGA VIGRE Algebra Group

2005 MSRI Summer School on Commutative Algebra, Snowbird, Utah

Professional Activities and Attendance

2003 Member American Mathematical Society

2005 Joint Meetings of the AMS and MAA, Atlanta, Georgia

2007 Joint Meetings of the AMS and MAA, New Orleans, Louisiana

Lectures

- 2002 Undergraduate Research Conference, Rose-Hulman Institute of Technology, March,
Alpha-almost-squares
- 2004 Graduate Student Seminar, University of Georgia, July
- 2006 VIGRE Algebra Seminar, University of Georgia, March, April, September
Algebra Seminar, University of Georgia, March, October,
Support Varieties of Tilting Modules
VIGRE Graduate Student Seminar, University of Georgia, March, *Root systems & graphs*,
October, *Organization for graduate students*
GRSC Computer Science Class, University of Georgia, October,
Organization for graduate students
- 2007 American Mathematical Society Sectional Meeting, Davidson, NC,
March, *Support Varieties of Tilting Modules*
AIM Workshop on Cohomology and Representation Theory for Finite Groups of Lie Type:
Computational Methods, Palo Alto, CA, June,
Cohomology of Lie algebras over small primes
VIGRE Graduate Student Seminar, University of Georgia,
October, *Organization for graduate students*
VIGRE Algebra Seminar, University of Georgia, October, *Cohomology & Smith Normal Form*

Courses Taught

- 2004 Precalculus, University of Georgia
Calculus Lab, University of Georgia
- 2007 Calculus, University of Georgia

Publications

1. Varieties of nilpotent elements for simple Lie algebras I: Good Primes, (with UGA VIGRE Algebra Group), *J. Algebra* 280 (2004), 719–737.
2. Varieties of nilpotent elements for simple Lie algebras II: Bad Primes, (with UGA VIGRE Algebra Group), *J. Algebra* 292 (2005), 65–99.
3. Support varieties for Weyl modules over bad primes (with UGA VIGRE Algebra Group), *J. Algebra* 312 (2007), 602–633.
4. Classifying alpha-almost-squares, to appear in *Mathematics Magazine*.
5. On Kostant's Theorem for Lie algebra cohomology, (with UGA VIGRE Algebra Group), submitted.
6. On support varieties of tilting modules, submitted.