

Suzanne Crifo

Education

- Expected August 2019 **North Carolina State University, Raleigh, NC, Ph.D. in Mathematics.**
Advisor: Kailash Misra | Areas of Research: Representation Theory of Lie Algebras, Combinatorics
Graduate Minor in Operations Research
- December 2016 **North Carolina State University, Raleigh, NC, M.S. in Mathematics.**
- May 2013 **College of the Holy Cross, Worcester, MA, B.A. in Mathematics and Music, Magna Cum Laude.**
Honors Thesis Advisor: Shirish Korde | *An Investigation into the Mathematical Concepts Present in Musical Compositions*

Teaching Experience

- August 2014 – present **Department of Mathematics, NCSU, Graduate Teaching Assistant.**
Instructor of Record:
- MA 405: Introduction to Linear Algebra, Spring 2018 (47 students)
 - MA 241: Calculus II, Summer 2018 (18 students)
 - MA 132: Computational Mathematics for Life and Management Sciences, Summer 2017 (8 students)
 - MA 131: Calculus for Life and Management Sciences A, Fall 2016 (47 students), Fall 2018 (176 students)
 - MA 114: Introduction to Finite Mathematics with Applications, Spring 2016 (162 students), Summer 2016 (6 students)
- Recitation Leader:*
- MA 141: Calculus I, Spring 2017 (28 students)
 - MA 131: Calculus for Life and Management Sciences, Fall 2015 (145 students total, 38 and 28 in problem sessions)
- Lecture Assistant:*
- MA 341: Applied Differential Equations I, Fall 2014 (216 students)
- October 2018 – present **STEMbrite Learning, Raleigh, NC, Math Subject Matter Expert.**
Prepare and deliver video presentations of precalculus and trigonometry examples for a future Pearson textbook.

Professional Development

- August 2017 – May 2018 **Preparing the Professoriate Fellow, North Carolina State University, Raleigh, NC.**
- Spring 2018: Instructor of Record for MA 405: Introduction to Linear Algebra. Student majors included mathematics, engineering, math education, physics, and others. Met weekly with faculty mentor to discuss the course progression.
 - Fall 2017: Observed faculty mentor Molly Fenn teach MA 405. Met weekly to plan online homework and discuss students' understanding of the material.
 - Participated in a semester-long seminar on curriculum design, which was used when designing course materials for MA 405. Presented results from this experience to peers.
 - Attended monthly workshop sessions on designing professional portfolios and preparation for a career in academics.
- July 2017 – present **Teaching and Communication Certificate, North Carolina State University, Raleigh, NC.**
Complete the 100 hours of approved activities and create a professional development portfolio. Attended and implemented strategies from workshops on effective teaching and communication, including how to engage with diverse learning styles, processing course evaluations, creating an e-portfolio, and curriculum design.

Professional Development (cont.)

May 2018 – present **Graduate Instructor Support and Tools committee member**, *North Carolina State University, Raleigh, NC.*

- Develop repeatable seminars, including “Syllabus Development” and “Mid-Semester Evaluation,” designed to aid graduate instructors in the Mathematics Department in their teaching.
- Organize files and maintain a Moodle site to share resources among graduate instructors.
- Introduce a system in which graduate instructors observe faculty members and one another, leading to the possibility of mentoring relationships.

May 2018 **Academic Packways: Gearing up for Faculty**, *North Carolina State University, Raleigh, NC.*

Chosen as one of 42 postdoctoral scholars and graduate students to participate in this selective program. Learned about various aspects of being a new faculty member at different types of institutions. Interacted with fellow participants and faculty members by giving and receiving feedback on application materials.

August 2017, August 2018 **Graduate School New TA Workshop Panel**, *North Carolina State University, Raleigh, NC.*

Invited as a panelist on the “Engineering and Science Panel.”

August 2014, **Mathematics TA Workshops**, *North Carolina State University, Raleigh, NC.*

May 2015 Attended and implemented strategies from both fall and spring teaching workshops offered by the Department of Mathematics. Workshop included sessions on effective teaching methods, TA responsibilities, lesson planning, classroom management, and different learning styles. Prepared a lesson plan and presented it to peers and the Teaching Enhancement Committee.

Research Experience

Summer 2015 **North Carolina State University, Raleigh, NC**, *Research Experience for Graduate Students.*

Advisor: Hoon Hong
Approximate Graph Edge Probability

Summer 2012 **College of the Holy Cross, Worcester, MA**, *Mellon Summer Research Program.*

Research Fellow, Advisor: Shirish Korde
The Discovery and Applications of Mathematical Concepts in Musical Compositions

Presentations and Talks

January 2019 **Baltimore, MD**, *Joint Mathematics Meetings.*
Some Maximal Dominant Weights and their Multiplicities for Affine Lie Algebra Representations

December 2018 **College of the Holy Cross, Worcester, MA**, *Mathematics and Computer Science Department Colloquium.*

An Introduction to Finite and Affine Lie Algebras and their Representation Theory, Invited Speaker

September 2018 **University of Delaware, Newark, DE**, *AMS Fall Eastern Sectional Meeting.*
Some Maximal Dominant Weights and their Multiplicities for Affine Lie Algebra Representations, Special Session

June 2018 **The Catholic University of America, Washington, DC**, *Quantum Affine Algebras.*
Maximal Dominant Weights for Affine Lie Algebra Representations

February 2018 **University of North Carolina, Chapel Hill, NC**, *Association for Women in Mathematics Triangle Conference.*

Maximal Dominant Weights for Representations of Affine Lie Algebras

November 2017 **North Carolina State University, Raleigh, NC**, *Triangle Area Graduate Mathematics Conference.*

Maximal Dominant Weights for Representations of Affine Lie Algebras

September 2015 **North Carolina State University, Raleigh, NC**, *Graduate Student Algebra Seminar.*
Searching for the Edge Probability Matrix

Conferences Attended

- June 2018 **University of Georgia, Athens, GA, Southeastern Lie Theory Workshop X.**
November 2016 **North Carolina State University, Raleigh, NC, AMS Fall Southeastern Sectional Meeting.**

Service and Outreach

- January 2019 **MAA Undergraduate Student Poster Session, Joint Mathematics Meetings, Baltimore, MD.**
Volunteered to judge three posters by undergraduate researchers.
- June 2017 – **LBD 5k: Lace Up to Bring Lewy Down, WakeMed Soccer Park, Cary, NC.**
present Event founder and organizer
This 5k run/walk raises awareness of Lewy Body Dementia and funds for the Lewy Body Dementia Association, Inc.
- Fall 2015 – **Association for Women in Mathematics Student Chapter, NCSU, North Carolina**
Spring 2017 **State University, Raleigh, NC.**
Secretary, 2015–2016; Vice President, 2016–2017
- April 2016, **Sonia Kovalevsky Day, North Carolina State University, Raleigh, NC.**
2017 Workshop Leader:
◦ Rational Tangles, *April 2017*
◦ Binary Numbers, *April 2016*
- February 2015 **M.A.T.T.E.R., Root Elementary School, Raleigh, NC.**
Invited to speak as a woman in mathematics to a group of African-American girls who meet in an after school program called Making Achievements Through Teaching Everyone Respect.
- November 2015 **Association for Women in Mathematics Student Chapter, NCSU, North Carolina State University, Raleigh, NC.**
Organizer and panelist for grad school panel hosted by AWM and UUG, a program that pairs graduate students and undergraduate students for a mentoring relationship.
- November 2014 **Association for Women in Mathematics Student Chapter, NCSU, North Carolina State University, Raleigh, NC.**
Invited as a panelist on “So You Think You Want to Go to Grad School” panel discussion.
- August 2013 – **Jesuit Volunteer Corps, Mobile, AL.**
July 2014 Served as a Case Manager at Catholic Social Services and a Team Member at L’Arche Mobile. This year-long commitment to living with other volunteers while serving poor communities focuses on the four values of community, social justice, spirituality, and simple living.

Honors and Awards

- April 2019 **Maltbie Award, North Carolina State University, Raleigh, NC.**
Given to graduate Teaching Assistants who have excelled in teaching.
- March 2019 **Award for Excellence in Classroom Teaching, Graduate Student Association, North Carolina State University, Raleigh, NC.**
- August 2014 – **STEM Fellowship, Department of Mathematics, North Carolina State University,**
May 2015 **Raleigh, NC.**
- May 2013 **Presidential Service Award, College of the Holy Cross, Worcester, MA.**
- April 2013 **Phi Beta Kappa, College of the Holy Cross, Worcester, MA.**
- April 2012 **Alpha Sigma Nu, College of the Holy Cross, Worcester, MA.**
- February 2012 **Pi Mu Epsilon, College of the Holy Cross, Worcester, MA.**

Professional Memberships

AMS, AWM.