Rachel Stahl

CONTACT

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EDUCATION

Ph. D. Candidate, Mathematics University of Connecticut, Storrs, CT Expected graduation May 2017

- Advisor: Dr. David Reed Solomon
- Thesis Title: Computability Theoretic Results for the Game of Cops and Robbers on Infinite Graphs

Master of Science, Mathematics University of Connecticut, Storrs, CT May 2014

Master of Arts, Secondary Mathematics Education Columbia University, Teacher's College, New York, NY, May 2009

Bachelor of Arts, Mathematics Bard College, Annandale on Hudson, NY, May 2008

HONORS, AWARDS, GRANTS, & **FELLOWSHIPS**

- Doctoral Dissertation Fellowship, University of Connecticut, Spring 2017
- Louis J. DeLuca Memorial Outstanding Teaching Assistant Award, University of Connecticut, Spring 2015
- Outstanding Scholars Fellowship Program, University of Connecticut, September 2012 - August 2015
- Predoctoral Summer Fellowship, University of Connecticut, 2014
- Math for America New Teacher Fellowship, New York, NY, June 2008 June 2011
- Bard Academic Resource Center Award for Mathematics Tutoring, Bard College, May 2008
- Trustee Leader Scholar, Bard College, 2007 2008
- Grant for funding from MAA and Bard College to host the Mid Hudson Mathematics Conference for Undergrads, Bard College, 2007
- Grant for funding from Bard College for Summer Research Internship, Bard College, 2007

TEACHING EXPERIENCE

University of Connecticut, Teaching Assistant, Storrs, CT, September 2012 - present

- Instructor of Record for Problem Solving (Fall 2012, Spring 2014, Fall 2014, Fall 2015, Spring 2017)
- Instructor of Record for Discrete Mathematics (Fall 2013, Fall 2016)

- Instructor of Record for Calculus for Business and Economics (Spring 2013 and Spring 2016)
- Discussion Section Instructor, Grader, Guest Lecturer for Discrete Mathematics (Spring 2015)

Bridge to Enter Advanced Mathematics Faculty, New York, NY Summer 2013, 2015, 2016

- A non-profit program to help underserved students enter advanced study in mathematics
- Taught and wrote curricula for Proofs, Combinatorics, and Problem Solving courses
- Mentor to Junior Faculty members in 2015 and 2016

J.P. Keefe Regional Technical Vocational School, Mathematics Teacher, Framingham, MA 2011-2012

- Taught Algebra and Geometry to 9th and 10th grade students
- Tutored students in Statistics and Pre-Calculus

New York City Department of Education, Mathematics Teacher, Bronx, NY 2009-2011 Urban Assembly School for Wildlife Conservation

- Taught and wrote curricula for 8th grade math, integrated algebra, and geometry
- Advisor to 8th grade students

Bard College Academic Resource Center Mathematics Tutor

2006 - 2008

• Peer tutor for Geometry, Number Theory, Pre-Calculus, Calculus I, II, III, Proofs and Fundamentals, Abstract Algebra, Linear Algebra, and Combinatorics

Math Homework Help Room Organizer

- Co-founder of the Math Homework Help Room, a drop-in tutoring service for math students of all levels
- Tutored and coordinated tutors and schedules

PAPERS

"Linear inequalities for enumerating chains in partially ordered sets," with Samuel Hsiao, Lauren Rose, and Ezra M. Winston. Transactions of the American Mathematical Society, 363 (2011), 2715–2732

CONFERENCE AND SEMINAR TALKS

- Computability Theory and the Game of Cops and Robbers on Infinite Graphs. AMS Eastern Sectional meeting, Special Session on Computability Theory: Pushing the Boundaries, Hunter College, New York, NY, May 2017
- Can You Beat a Computer at PacMan? UConn Math Club, Storrs, CT, March 2017
- Recursion Theoretic Results for the Game of Cops and Robbers on Computable Graphs. New England Recursion and Definability Seminar, Wellesley College, Wellesley, MA, November 2016
- The Game of Cops and Robbers on Infinite Graphs. S.I.G.M.A Graduate Seminar, University of Connecticut, Storrs, CT, September 2016

- Effective Strategies for the Game of Cops and Robbers on Computable Graphs.
 Graduate Student Conference in Logic, Notre Dame University, Notre Dame, IN,
 April 2016
- Math Circle Poster and Activity Session, Joint Mathematics Meetings, Boston, MA, January 2012
- Enumerating Chains in Partially Ordered Sets, Student Presenter with Ezra Winston, Mid Hudson Mathematics Conference for Undergrads, October 2007

UNDERGRAD RESEARCH EXPERIENCE

Bard College, Annandale on Hudson, NY

July 2007 - May 2008

- Senior Research Project, Mathematics Department
 - Independent yearlong research project in Algebraic Combinatorics
 - Classified distributive Lattices which have flag h-vectors consisting of only 0's and 1's
- Summer Research for Undergraduates
 - Research assistant to Dr. Lauren Rose and Dr. Samuel Hsiao
 - Contributed to the classification of flag f-vectors in bounded and semipure partially ordered sets

SERVICE

- Graduate Student Coordinator, Noetherian Ring (Women in Math), Department of Mathematics, University of Connecticut, Storrs, CT, October 2013 present
- Mentor, UConn Math TA Network, 2016 present
- Managing Time/ Work-Life Balance Panel, New TA Orientation, Center for Excellence in Teaching and Learning, UConn, 2016
- Panelist, SIGMA Seminar and Math Club, Applying to Grad School, Taking Qualifying Exams, Choosing an Advisor, 2013, 2015, 2016
- Faculty Hiring Committee, Advisory Group Member Bridge to Enter Advanced Mathematics, New York, NY, 2014 present
- Experienced TA Presentation, UConn Math Department New TA Orientation, 2015
- Co-Founder Bard Math Circle, Annandale-on-Hudson, NY, 2007 2008
- Representative of the Division of Science, Math, and Computing, Educational Policies Committee, Bard College, 2007 2008
- Representative of Student Educational Needs, Bard College Mathematics Committee, Bard College, 2007- 2008
- Student Steering Committee Member Mid Hudson Mathematics Conference for Undergrads, Bard College, 2007