

Bradley Elliott

CONTACT INFORMATION	Emory University Department of Mathematics Math and Science Center, N406 400 Dowman Drive Atlanta, GA 30322 <i>Mobile:</i> 859-559-9381 <i>Email:</i> bradley.elliott@emory.edu <i>Website:</i> http://www.math.emory.edu/~bellio3/ <i>Blog:</i> https://bradelliottmathblog.home.blog/
ACADEMIC INTERESTS	Extremal graph theory, structural graph theory, hypergraphs
EDUCATION	Emory University , Atlanta, GA Mathematics PhD student with advisor Vojtěch Rödl Expected graduation May 2020 University of Kentucky , Lexington, KY Bachelor of Computer Science May 2013 Master of Business Administration May 2014
PUBLICATIONS AND PREPRINTS	3. <i>On degree sum conditions and vertex-disjoint chorded cycles</i> with Ronald Gould and Kazuhide Hirohata. Submitted. arXiv:1911.08686 2. <i>Increasing paths in countable graphs</i> with Andrii Arman and Vojtěch Rödl. Submitted. arXiv:1905.03612 1. <i>Embedding hypertrees into Steiner triple systems</i> with Vojtěch Rödl. <i>Journal of Combinatorial Designs</i> 27 (2019), no. 2, 82-105.
INVITED TALKS	<i>On degree sum conditions and vertex-disjoint chorded cycles</i> , Discrete/Combinatorics Seminar, University of South Carolina, Columbia, South Carolina, October 25, 2019. <i>Notions of Infinite Increasing Paths</i> , Atlanta Lecture Series XXIII, Georgia Institute of Technology, Atlanta, Georgia, March 30, 2019.
SUBMITTED TALKS	<i>Graphs with subgraphs of large girth and large chromatic number</i> , Graduate Research Workshop in Combinatorics, Lawrence, Kansas, June 13, 2019. <i>Increasing paths in countable hypergraphs</i> , 50th Southeastern International Conference, Florida Atlantic University, Boca Raton, Florida, March 7, 2019. <i>Embedding hypertrees into Steiner triple systems</i> , 49th Southeastern International Conference, Florida Atlantic University, Boca Raton, Florida, March 5, 2018.
AWARDS	Marshall Hall Teaching Award 2020 Awarded to one graduate student each year for outstanding teaching in the Emory Math Department.
WORKSHOP PARTICIPATION	Graduate Research Workshop in Combinatorics Summer 2019 The GRWC is a two-week collaborative research workshop for advanced graduate students and postdocs from all areas of combinatorics. Participants work in small groups with faculty on research problems from across the discipline.

TEACHING
EXPERIENCE

Calculus I Instructor - Emory University - Active learning Fall 2019
 Calculus I Instructor - Emory University - Lecture Fall 2016, Fall 2018
 Calculus II Instructor - Emory University Spring 2017, Fall 2017, Summer 2018
 Discrete Structures Instructor - Emory University Summer 2017
 Combinatorics I Instructor - QTM Math Camp Summer 2018, Summer 2019
 Combinatorics II Instructor - QTM Math Camp Summer 2019
 Teaching Assistant and Grader Fall 2015, Spring 2016, Spring 2018
 Honors Linear Algebra, Honors Vector Calculus, Honors Calculus II, Linear Algebra,
 Life Sciences Calculus - Emory University
 Calculus Tutor - Emory University and University of Kentucky 2014-2016

OUTREACH

Director of Emory Math Circle* Summer 2018-present
 I run a math enrichment program for 200+ middle and high school students. I recruit and train instructors, manage the budget and facilities, plan special events, and communicate with the participating families.

Instructor at Emory Math Circle Spring 2017-present
 I teach one of the middle school levels of the program I direct. I plan and execute semi-weekly lessons designed to teach the students problem-solving skills, curiosity, and skepticism.

Instructor at QTM Math Camp Summer 2018, 2019
 I teach Combinatorics at a 3-week math camp for advanced high school students. I design the courses myself, and create the problem sets for each day. During the second and third weeks, I help the students conduct research projects and prepare posters of their results.

Organizer of Julia Robinson Math Festivals Fall 2018, 2019
 I have planned two Julia Robinson Math Festivals, which are designed to help students explore the richness of mathematics through collaboration and creative problem-solving.

Organizer of Women in STEM panel Fall 2019
 I recruited panelists working in science, technology, math, and engineering fields to participate on a panel, for an audience of students enrolled in Emory Math Circle.

Education Advisor for Emory University Fraternity Summer 2016-present
 I advise the Emory chapter of Beta Theta Pi fraternity. I meet regularly with the chapter's VP of Education to help plan safe, meaningful programs for their new members, and also meet with the advisory team to address chapter-wide issues.

Organizer of AMC-8 exam Fall 2018, 2019
 I twice hosted the MAA's AMC-8 exam for roughly 65 middle school students each time.

Organizer of Math Kangaroo Competition Spring 2019
 I hosted the Math Kangaroo exam for 52 K-12 students.

Organizer of Tri-Math Tournament competition Spring 2019
 I hosted a math competition for 24 high school students, that served as a recruitment event for QTM Math Camp.

Moderator of a math careers panel Summer 2019
I recruited panelists who had different levels of math education and questioned them about life as a mathematician, for an audience of math-interested high school students.

Microteaching facilitator Fall 2019
I was selected to run a practice-teaching session for first-year graduate students. Twelve students each gave a ten-minute sample lesson, then received feedback from the group.

Orientation panelist Fall 2019
I was selected to serve on a panel and answer questions from first-year grad students in the basic sciences.

*For more detail about Emory Math Circle, see our website
<http://www.mathcs.emory.edu/mathcircle/about.html>

PROFESSIONAL ASSOCIATIONS	Mathematical Association of America (MAA)	2015 - present
	American Mathematical Society (AMS)	2015 - present
REFEREE WORK	Combinatorica, Journal of Graph Theory	
COMPUTING SKILLS	Canvas; WebAssign; Programming in Sage, Python, C++, Java, MATLAB	