

# Kaylee Weatherspoon

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## EDUCATION

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### University of South Carolina Honors College

*B.S. in Mathematics, Minors: Chemistry, French*

*Recent Courses:* Graduate Abstract Algebra, Graduate Discrete Math, Discrete Optimization, Foundations of Network Science, Number Theory

Columbia, SC

*Aug 2019 - May 2023*

### Budapest Semesters in Mathematics

*Study Abroad*

*Courses:* Discrete and Convex Geometry, Measure Theory, Mathematical Problem Solving, Research, Combinatorics of Set Systems

Budapest, Hungary

*Jan 2022 - May 2022*

## PAPERS

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### Four-regular Graphs with Extremal Rigidity Properties

*joint with Prof. Tibor Jordán, Henry Simmons, Zeyu Zheng, Robin Huang*

*Discrete Mathematics*, submitted

### A Generalization of Szlam's Lemma

*joint with Amelia Shapiro, Alan Li*

*Geombinatorics*, published

## RESEARCH EXPERIENCE & EMPLOYMENT

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### University of South Carolina Department of Mathematics

*Grader, Honors Discrete Math II*

Columbia, SC

*Jan 2023-May 2023*

### Yale University Department of Mathematics

*SUMRY NSF-REU in Discrete Geometry*

New Haven, CT

*May 2022- July 2022*

### University of South Carolina Department of Mathematics

*Honors College Research Grant, Magellan Grant Researcher*

Columbia, SC

*Jan 2021-Present*

### Budapest Semesters in Mathematics Research Group

*Member of Research Group in Rigidity Theory*

Budapest, Hungary

*Jan 2022-May 2022*

### University of South Carolina Department of Mathematics

*Grader, Honors Discrete Math I*

Columbia, SC

*Aug 2021-Dec 2021*

### Auburn University Department of Mathematics

*NSF-REU in Discrete Mathematics*

Auburn, AL

*Jun 2021-Aug 2021*

### University of South Carolina Student Success Center

*Tutor: Math 111-500s, Chemistry up to Organic, French 100s-300s*

Columbia, SC

*Jan 2020-Present*

### Mathnasium—The Math Learning Center

*Tutor: Kindergarten to Calculus*

Greensboro, NC

*May 2018-Aug 2019*

## SUMMER SCHOOLS

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### The Erdős Center of the Rényi Institute: Discrete and Convex Geometry

*Graph Structure and Geometry*

Budapest, Hungary

*August 2023*

### Women and Mathematics at the Institute for Advanced Study

*Patterns in Integers*

Princeton, NJ

*May 2023*

## CONFERENCE & WORKSHOPS ATTENDED

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### JMM PME Undergraduate Paper Session

*Four-Regular Graphs with Extremal Rigidity Properties*

Boston, MA

*Jan 2023*

### UMS Poster Session at U-Illinois Chicago

*Four-Regular Graphs with Extremal Rigidity Properties*

Chicago, IL

*Nov 2022*

### GROW at Duke

*non-speaking attendance*

Durham, NC

*Oct 2022*

### Young Mathematicians Conference at The Ohio State University

*Four-Regular Graphs with Extremal Rigidity Properties*

Columbus, OH

*Aug 2022*

### Budapest Semesters in Mathematics Colloquium

*Four-Regular Graphs with Extremal Rigidity Properties*

Budapest, Hungary

*Feb 2022, May 2022*

### Round the World Relay in Combinatorics

*non-speaking attendance*

Online

*June 2021*

<b>Combinatorial and Additive Number Theory (CANT) Workshop (Invited Talk)</b>	Online
<i>Characterizing Finite, Separable, Edge-maximal Unit Distance Graphs</i>	May 2021
<b>MSRI Celebration of Women in Mathematics</b>	Online
<i>non-speaking attendance</i>	May 2021
<b>Pi Mu Epsilon Regional Conference</b>	Online
<i>Characterizing Finite, Separable, Edge-maximal Unit Distance Graphs</i>	April 2021
<b>Discover UofSC Poster Session</b>	Online
<i>Chromatic Number of the Plane Restricted to Disks</i>	April 2021
<b>Workshop on Euclidean Ramsey Theory: dedicated to the memory of Ron Graham</b>	Online
<i>non-speaking attendance</i>	March 2021
<b>JMM Undergraduate Poster Session</b>	Online
<i>Chromatic Number of the Plane Restricted to Disks</i>	Jan 2021
<b>Guilford College Department of Chemistry Colloquium</b>	Greensboro, NC
<i>Chemiluminescent Detection of Metal Ions in Water</i>	April 2019

## OUTREACH & ENGAGEMENT

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<b>Yale NSF-REU DEI Seminar</b>	New Haven, CT
<i>Co-Chair of weekly Diversity, Equity, and Inclusion Seminar</i>	May 2022- July 2022
<b>UofSC Inaugural Top Scholar Seminar Outreach Talk</b>	Columbia, SC
<i>Presenter: "Collaborative Problem Solving through Open Questions in Mathematics"</i>	October 2021
<b>Mungo Undergraduate Teaching Award Committee</b>	Columbia, SC
<i>Undergraduate Evaluator</i>	March 2021-April 2021
<b>South Carolina High School Math Competition</b>	Columbia, SC
<i>Volunteer</i>	January 2021
<b>Pi Mu Epsilon Mathematics Honors Society</b>	Columbia, SC
<i>Member</i>	Fall 2019-Present
<b>Association of Women in Mathematics</b>	Columbia, SC
<i>Member</i>	Fall 2019-Present

## HONORS & AWARDS

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<b>Phi Beta Kappa Academic Honor Society</b>	2022
inducted into the nation's oldest and most prestigious honor society for excellence in the liberal arts and sciences	
<b>McNair Scholar</b>	2019-2023
awarded an academic full-ride scholarship as part of the USC Honors College Top Scholar program	
<b>USC Victor W. Laurie Undergraduate Research Scholarship</b>	2020-2021
won as a sophomore the math department's top prize for undergraduate research (typically reserved for upperclassmen)	
<b>USC Department of Mathematics Markham Scholarship</b>	2022-2023
awarded a departmental scholarship for excellence in mathematics	
<b>Magellan Research Scholarship</b>	2021
awarded a year-long grant to pursue faculty-mentored research	
<b>USC Honors College Research Grant</b>	2022-2023
awarded a year-long grant to pursue faculty-mentored research	
<b>National Merit Scholar</b>	2019
recognized for scholarly achievement and promise within a national pool of candidates	