

Jason O'Neill

✉ jmoneill@ucsd.edu
📄 www.math.ucsd.edu/~jmoneill/

Education

- 2017– **Ph.D Mathematics**, *UC San Diego*, Department of Mathematics.
Advisor: Jacques Verstraëte
Expected graduation: June 2022
- 2013–2017 **B.S. Mathematics**, *UCLA*.

Submitted Preprints

- 2021 A minimal Steiner-type problem (with Jacques Verstraëte) – In preparation
- 2021 Saturation problems for convex geometric hypergraphs (with Sam Spiro) – In preparation
- 2020 Extremal problems for pairs of triangles (with Zoltán Füredi, Dhruv Mubayi, and Jacques Verstraëte) - Submitted
- 2020 A note on k -wise oddtown problems (with Jacques Verstraëte) - Submitted
- 2018 A generalization of the Bollobás set pairs inequality (with Jacques Verstraëte) - Submitted

Publications

- 2021 Non-trivial d -wise intersecting families (with Jacques Verstraëte) - Journal of Combinatorial Series A, 178
- 2018 On the poset and asymptotics of Tesler matrices, The Electronic Journal of Combinatorics, 25(2)

Research talks

- Winter 2020 UCSD Combinatorics Seminar
- Nov. 2019 AMS Regional Special Sessions
- April 2019 Graduate Student Combinatorics Conference at UPenn
- March 2019 UCSD Combinatorics Seminar
- Dec. 2017 UCLA Graduate Participating Seminar in Combinatorics

Teaching Experience

I have been a teaching assistant at UC San Diego in the following courses:

- Fall 2020 Enumerative Combinatorics
- Summer 2020 Introduction to Analysis II
- Spring 2020 Modern Algebra II
- Fall 2019 Extremal Combinatorics and Graph Theory
- Fall 2019 Mathematical Reasoning
- Spring 2019 Discrete Mathematics and Graph Theory
- Winter 2019 Modern Algebra I
- Fall 2018 Mathematical Reasoning

- Summer 2018 Calculus
- Spring 2018 Introduction To Cryptography
- Winter 2018 Combinatorics
- Fall 2017 Calculus For Science and Engineering

Service

- 2020– UCSD Undergraduate Affairs committee member
- 2018– Co-organizer of UCSD Graduate Student Combinatorics Seminar
- 2018– Organizing Committee member for the Graduate Student Combinatorics Conference 2020
- 2018– Volunteer for SD Refugee Tutoring
- 2018– UCSD Graduate Affairs committee member
- 2018– Founding member of UCSD Mathematics Graduate Student Council (MGSC)
- 2018–2020 UCSD Graduate Student Association (GSA) representative
- 2018–2020 GSA Climate Action and Policy Committee member
- 2018–2019 UCSD MGSC Vice Chair
- 2012 Assistant Instructor in summer school Algebra course

Experiences

- 2019 MSRI Summer School; The polynomial method
- 2015 - 2016 UCLA Mathematics VIGRE REU

Awards

- 2017 UCSD James B. Ax Fellowship