

Zachary Slonim

zachslonim@math.ucla.edu

EDUCATION

University of California, Los Angeles	2024 –
PhD, Mathematics	
Research Interests: Algebraic and Enumerative Combinatorics	
Master of Arts in Mathematics	December 2025
U.C. Berkeley, College of Letters and Sciences	2020 – 2024
BA, Pure Mathematics (with Honors)	GPA: 4.00

AWARDS/HONORS

Department Citation (Valedictorian)	2024
<ul style="list-style-type: none">Awarded by the UC Berkeley Math Department to the top graduating student in mathematics	
Paul Chernoff Memorial Prize	2024
<ul style="list-style-type: none">Awarded by the UC Berkeley Math Department to one student in recognition of outstanding scholarship in mathematics	
UC Berkeley Dean's Honors List	2020 – 2022
<ul style="list-style-type: none">Awarded to students in the UC Berkeley College of Letters & Sciences to recognize outstanding academic achievement each fall and spring	
Top 500 in Putnam Competition	2021 & 2022

PUBLICATIONS (5)

- On the Book Thickness of Total Graphs of Commutative Rings, with M. Dolorfino, L. Martin, Y. Sun, and Y. Yang. *Missouri Journal of Mathematical Sciences*, volume 37 (2025).
 - <https://doi.org/10.35834/2025/3702129>
- Characterization of Solubilizers of Elements in Minimal Simple Groups, with B. Akbari, J. Chuharski, and V. Sharan. *Communications in Algebra*, volume 53 (2024).
 - <https://doi.org/10.1080/00927872.2024.2428320>
- On the Characterization of Alternating Groups by Codegrees, with M. Dolorfino, L. Martin, Y. Sun, and Y. Yang. *Bulletin of the Australian Mathematical Society*, volume 110 (2024).
 - <https://doi.org/10.1017/S0004972723001429>
- On the Characterization of Sporadic Simple Groups by Codegrees, with M. Dolorfino, L. Martin, Z. Slonim, Y. Sun, and Y. Yang. *Bulletin of the Australian Mathematical Society*, volume 109 (2023).
 - <https://doi.org/10.1017/S0004972723000187>
- Classifying Solvable Primitive Permutation Groups of Low Rank, with M. Dolorfino, L. Martin, Y. Sun, and Y. Yang. *Journal of Computational Algebra*, volume 5 (2023).
 - <https://doi.org/10.1016/j.jaca.2023.100005>

CONFERENCES AND TALKS

UCLA Participating Algebra Seminar May 2025

The Cohomology of Quotient Spaces. Fake Betti Numbers.

Rice University Gulf Coast Undergraduate Research Symposium October 2022

On the Characterization of Alternating Groups by Codegrees.

TEACHING

Teaching Assistantships at UCLA

Math 32B: Calculus of Several Variables Winter 2026

Math 31B: Integration and Infinite Series Fall 2025

Math 61: Introduction to Discrete Structures [x2] Fall 2024 & Summer 2025

Math 33A: Linear Algebra and Applications Spring 2025

Math 31AL: Differential and Integral Calculus Laboratory Winter 2025

Student Learning Center at UC Berkeley February 2022 – May 2024

Tutored over 200 students in Linear Algebra, Real and Complex Analysis, and Abstract Algebra

Professionally trained in individual and group tutoring, and pedagogical techniques