# Ian A. Sullivan

Ph.D. Student University of California, Davis Department of Mathematics

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#### **Research Interests**

I am interested in low-dimensional topology, Khovanov/Floer homology theories, and exotic 4-manifolds and knotted surfaces.

### Education

	September 2021 - Present	<b>University of California, Davis</b> Ph.D. in Mathematics Advisors: Melissa Zhang & Eugene Gorsky
F 1	September 2017 - June 2020	<b>University of California, San Diego</b> B.S. in Mathematics
Employment		
	September 2021 - Present	<b>University of California</b> , Davis, CA Associate Instructor and Teaching Assistant

## Papers & Preprints

1. I. A. Sullivan, M. Zhang, Kirby belts, categorified projectors, and the skein lasagna module of  $S^2 \times S^2$ , (Submitted)

## **Research Talks**

- Graduate Student Topology and Geometry Conference 2024, Michigan State University (April 2024)
- Geometry & Topology Seminar, UC Davis (February 2024)
- Student-Run Research Seminar, UC Davis (November 2023)
- Student-Run Research Seminar, UC Davis (October 2022)

## Outreach and Professional Activities

- Co-hosted the UC Davis Student Run Research Seminar (2023-2024)
- Directed Reading Program, UC Davis Mathematics Department (2022-2023) Undergraduate project on Khovanov homology.
- BAMO Grading Team (March 2023)
  Graded for the 24th annual Bay Area Mathematical Olympiad.
- Directed Reading Program, UC Davis Mathematics Department (2021-2022) Undergraduate project on category theory and sheaves.
- Member of the UC Davis Spectra chapter.

### **Teaching Experience**

- Instructor of record:
  Math 16A: Short Calculus (Summer 2022)
- Teaching Assistant:
  - Math 150A: Abstract Algebra (Winter 2024)
  - Math 150A: Abstract Algebra (Fall 2023)
  - Math 108: Intro to Abstract Mathematics (Spring 2024)
  - Math 108: Intro to Abstract Mathematics (Winter 2024)