

Aru Mukherjea  
Curriculum Vitae  
amukherj@utexas.edu

## Education

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**PhD in Mathematics** June 2027 (expected)  
University of Texas at Austin, Austin, TX; supervised by Maggie Miller

**Bachelor of Science in Mathematics** June 2021  
California Institute of Technology, Pasadena, CA

## Preprints and Publications

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- **Mukherjea, A.** “Higher degree covering moves for 3-manifolds.” Preprint. arXiv:2507.15141 [math.GT], July 2025
- Bohm, R. and **Mukherjea, A.** “Concordance of surfaces in 4-manifolds.” Preprint. Expository, based on lectures of Maggie Miller at the New structures in low-dimensional topology summer school in Budapest, 2024. To be included in a collection of notes from the summer school.
- Chen, L. and **Mukherjea, A.** “From braid groups to mapping class groups.” *Mathematische Zeitschrift* 303.2 (2023): 27. DOI 10.1007/s00209-022-03167-5

## Conference and Seminar Talks

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- University of Notre Dame Topology Seminar November 2025
- University of Nebraska-Lincoln Seminar on Groups, Semigroups, and Topology September 2025
- GT GAPS (virtual) September 2025
- Trisectors Workshop (lightning talk) June 2025
- Graduate Student Topology and Geometry Conference (short talk) April 2025
- Foliations Log Cabin Workshop (expository) January 2025
- Trisectors Zoom Pre-Workshop (expository, virtual lightning talk) June 2024

## Teaching

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**Graduate Teaching Assistant, University of Texas at Austin**

- M427L Advanced Calculus for Applications II Spring 2026
- M408D Sequences, Series, and Multivariable Calculus Fall 2025, Spring 2023
- M362K Probability I Fall 2024
- MF340L Matrices/Matrix Calculations Summer 2023, Summer 2024
- M427J Differential Equations with Linear Algebra Spring 2024
- M341 Linear Algebra and Matrix Theory Fall 2023
- M408D Sequences, Series, and Multivariable Calculus (Honors) Fall 2022

**Undergraduate Teaching Assistant, California Institute of Technology**

- Ma 0 Transition to Mathematical Proofs Summer 2020

**Lead Tutor, Dean’s Office Math Study Sessions, California Institute of Technology** September 2020–June 2021

## Service

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<b>Mentor, Texas Experimental Geometry Lab, <i>University of Texas at Austin</i></b>	Spring 2026–Present
· Drawing the Gordian Graph	
<b>Organizer, Geometric Topology Grad And Postdoc Seminar (GT GAPS), <i>Virtual</i></b>	Summer 2023–Present
<b>Mentor, Directed Reading Program in Mathematics, <i>University of Texas at Austin</i></b>	Spring 2022–Present
<b>Organizer, Directed Reading Program in Mathematics, <i>University of Texas at Austin</i></b>	Fall 2022–Spring 2025
<b>Organizer, Math for All Satellite Conference, <i>University of Texas at Austin</i></b>	Fall 2022–Spring 2025
<b>Organizer, Math for All Wikipedia Edit-A-Thon, <i>University of Texas at Austin/Virtual</i></b>	Spring 2024–Spring 2026
<b>Speaker, Sunday Morning Math Group, <i>University of Texas at Austin</i></b>	
· Symmetries and Groups	November 2025
· Fractals and the Coastline Paradox	February 2024
<b>Organizer, 3-Manifolds Learning Seminar, <i>University of Texas at Austin</i></b>	Spring 2024
<b>Organizer, Summer Mini-Courses, <i>University of Texas at Austin</i></b>	Summer 2023
<b>Organizer, Junior Topology Seminar, <i>University of Texas at Austin</i></b>	Spring 2023
<b>Organizer, Characteristic Classes Learning Seminar, <i>University of Texas at Austin</i></b>	Fall 2022
<b>Organizer, First Year (Sophex) Seminar, <i>University of Texas at Austin</i></b>	Fall 2021–Fall 2022

## Workshops Attended

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<b>Trisectors Workshop, <i>University of Texas at Austin</i></b>	June 2025
<b>Foliations Log Cabin Workshop, <i>St. George, Utah</i></b>	January 2025
<b>New structures in low-dimensional topology, <i>Rényi Institute</i></b>	July 2024
<b>Summer School in Mathematics: Low dimensional Topology, <i>Institut Fourier</i></b>	June 2024
<b>Georgia Topology Summer School, <i>University of Georgia</i></b>	May 2024

## Conferences Attended

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<b>Virginia Topology Conference, <i>University of Virginia</i></b>	December 2025
<b>Knots, Groups, and Manifolds, <i>UQAM</i></b>	August 2025
<b>Georgia International Topology Conference, <i>University of Georgia</i></b>	May 2025
<b>Links in Dimensions 3 and 4, <i>ICERM</i></b>	May 2025
<b>Graduate Student Topology and Geometry Conference, <i>Indiana University Bloomington</i></b>	April 2025
<b>New structures in low-dimensional topology, <i>Rényi Institute</i></b>	July 2024
<b>Georgia Topology Conference, <i>University of Georgia</i></b>	May 2024
<b>Graduate Student Topology and Geometry Conference, <i>Michigan State University</i></b>	April 2024
<b>Texas Geometry and Topology Conference, <i>Rice University</i></b>	November 2023
<b>Moab Topology Conference, <i>Utah State University Moab</i></b>	May 2023
<b>Texas Women in Math Symposium, <i>University of Texas at Austin</i></b>	February 2023
<b>Graduate Student Conference in Algebra, Geometry, and Topology, <i>Temple University</i></b>	May 2022

## Awards and Honors

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<b>UT Austin Dean's Strategic Fellowship</b>	2021–Present
<b>Samuel P. and Frances Krown SURF Fellowship</b>	2020
<b>Mark Reinecke SURF Fellowship</b>	2019