Urshita Pal

Research Interests

University of Michigan Department of Mathematics 530 Church Street Ann Arbor, MI, USA urshita@umich.edu urshitapal.github.io

Group Cohomology, Representation Theory, Braids & Configuration Spaces

Education University of Michigan, USA

Ph.D., Mathematics, Expected 2026.

Advisor: Jenny Wilson

Chennai Mathematical Institute, India

B.Sc., Mathematics & Computer Science, 2018-21.

Teaching University of Michigan

Instructor, Math 115, Winter 2023 Instructor, Math 115, Fall 2022 Instructor, Math 115, Winter 2022 Instructor, Math 115, Fall 2021

Chennai Mathematical Institute

Teaching Assistant, NPTEL Rings & Fields, Jan-March 2021

Teaching Assistant, Topology, Spring 2021

Teaching Assistant, Complex Analysis, Spring 2021

Teaching Assistant, Analysis 3, Fall 2020

Teaching Assistant, Probability Theory, Spring 2020

Awards and Fellowships

Gold Medal of Excellence, BSc Math & Computer Science

Chennai Mathematical Institute, 2021

Tuition Fee Waiver

Chennai Mathematical Institute, Aug 2018 - April 2021

Bronze Medal, European Girls Math Olympiad

Held in Florence, Italy, 2018

International Math Olympiad Training Camp, Mumbai, India

Selected for Participation, 2017 & 2018

Talks

Student Seminars

- -Higher Dimensional Cohomology of $SL_n\mathbb{Z}$, Winter 2023
- -Grassmannian Cohomology and Symmetric Polynomials, Winter 2023
- -A Gentle Introduction to Representation Stability, Fall 2022
- The Combinatorial Nullstellensatz and its Applications, Winter 2022
- -Braid Groups, Fall 2021

Service and Mentorship

Student Dynamics/Geometry/Topology Seminar

-Co-organiser for the Academic Year 2022-23

AWM Mentor-Mentee Program

-Mentor for the Academic Year 2022-23

Michigan Directed Reading Program

-Mentor, Winter 2023

Michigan Math Club

-Fagnano's Problem and Reflecting Triangles, Jan 2023

Michigan Math Circle

-Tiling With Dominoes, Feb 2022

Conferences and Workshops

- Nearly Carbon Neutral Geometric Topology Conference, September 2022 (Attended Topic Group: Group Actions on Hyperbolic Spaces)
- Michigan Research Experience for Graduates, June 2022 (Project Topic: *Braids and Polynomials*)

Languages and Skills

Hindi, English, Bengali (native); German (basic)

LATEX, C++, Haskell, Python, Java