Marc Gotliboym

Curriculum Vitae
marcg57@msu.edu
https://mgotliboym.github.io/

Academic Interests

Equivariant stable homotopy theory, algebraic K-theory, and trace methods.

Education

Michigan State University

Ph.D. in Mathematics (2021-Present).

Advisor: Teena Gerhardt.

Stevens Institute of Technology

M.S. in Mathematics, 2018.

B.S. in Computer Science, 2018 with high honors.

Senior Thesis: *A Foundation for Over- and Under-Approximating Monitors Analyzing Information Flow.* Advisor: David Naumann.

Invited Positions

Newton Institute, Research Member, May 2025. *Equivariant homotopy theory in context program.*

Awards

Dr. William L. Harkness Endowed Fellowship, *Michigan State University*, 2025.

Stephen L. Bloom Theoretical Computer Science Award, *Stevens Institute of Technology*, 2018.

Seminar Talks

Generalizing Covering Spaces to Infinity. Student Topology and Geometry Seminar, Michigan State University, 2025.

The Many Guises of the Bar Construction. Student Topology and Geometry Seminar, Michigan State University, 2024.

Quillen's Q-Construction of Algebraic K-Theory. eCHT Kan Seminar, eCHT, 2023.

Covering Spaces. Algebra Learning Seminar, Michigan State University, 2023.

H-Spaces and Hopf Algebras. Student Topology and Geometry Seminar, Michigan State University, 2022.

Exploring Conway's Game of Life on Various Compact Topologies. Mathematics Seminar Series, Scranton University, 2017.

Teaching Experience

Michigan State University

Instructor, *Calculus I* — MTH 132 (Summer 2022, Fall 2022).

Teaching Assistant, *Honors Linear Algebra* — MTH 317H (Spring 2025).

Teaching Assistant, *Differential Equations* — MTH 235 (Spring 2023).

Teaching Assistant, *Introduction to Proofs* — MTH 299 (Fall 2023).

Stevens Institute of Technology

Teaching Assistant, *Principles of Programming Languages* — CS 496 (2017).

Professional Service

Co-organizer of the Graduate Student Topology and Geometry Conference at Michigan State University, Spring 2024.

Co-organizer of the Graduate Student Topology and Geometry seminar, 2023-2024.

Conferences Attended

New horizons for equivariance in homotopy theory, Newton Institute 2025

Midwest Topology Seminar, Indiana University 2025

Life After the Telescope Conjecture, SLMath 2024

European Autumn School in Topology, Utrecht 2024

Algebraic Structures in Topology, San Juan 2024

Mid-Atlantic Topology Conference, Northeastern University 2024

Algebraic K-theory and Redshift, Mainz 2023

Scissors Congruence, Algebraic K-theory, and Trace Methods, Indiana University 2023

Midwest Topology Seminar, Purdue University 2023