

Trent Lucas

Brown University
Department of Mathematics

trent_lucas@brown.edu
trent-lucas.github.io

Education **Brown University**

Ph.D., Mathematics, expected May 2025 (Advisor: Bena Tshishiku).
Sc.M., Mathematics, May 2022.

University of Virginia

B.A., Mathematics and Computer Science, May 2020

Research

Birman-Hilden Theory for 3-Manifolds, submitted.
Veech Fibrations, with Sam Freedman, submitted.
Homological Representations of Low Genus Mapping Class Groups, J. Algebra 647 (2024) 533-566.

Teaching

Sheridan Teaching Certificate I, Brown University, Fall 2021

Brown University

TA, CEMA 922 Set Theory (Brown Pre-College Program), Summer 2024
Instructor, MATH 50 Analytic Geometry and Calculus, Fall 2023
Instructor, MATH 180 Multivariable Calculus, Spring 2023
TA, MATH 180 Multivariable Calculus, Fall 2022
TA, MATH 90 Introductory Calculus Part I, Spring 2022
TA, MATH 90 Introductory Calculus Part I, Fall 2021

University of Virginia

TA, MATH 3310 Basic Real Analysis, Spring 2020
TA, MATH 3310 Basic Real Analysis, Fall 2019

Awards

Outstanding Graduate Teaching Award, Brown Math Department, Fall 2024
E.J. McShane Prize, University of Virginia Math Department, Spring 2020
Edwin E. Floyd Prize, University of Virginia Math Department, Spring 2019

Mentoring

Brown University Directed Reading Program

Heon Lee, *Geometric Group Theory*, Summer 2024
Luna Wang, *Geometric Group Theory*, Spring 2024
Alex Feiner, *Representation Theory of Finite Groups*, Fall 2022
Alex Feiner, *Stokes' Theorem*, Fall 2021
Alex Feiner, *The Geometry of Surfaces*, Spring 2021

Service

Brown Graduate Student Seminar, Organizer, Fall 2021 - present
Brown Math Diversity and Inclusion Committee, Member, Fall 2022 - Spring 2023

Talks

Topology, Representation Theory, and Higher Structures (Sabhal Mòr Ostaig), Summer 2024
Notre Dame Topology Seminar, March 2024
Spring Topology and Dynamics Conference (UNC Charlotte), March 2024
Brown Geometry and Topology Seminar, December 2023
GTA Philadelphia (Temple University), May 2023
AMS New England Grad Student Conference (Brown University), April 2023
Brown Graduate Student Seminar, four talks