Sihao Ma

Curriculum Vitae
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Department of Mathematics
University of Notre Dame
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Notre Dame, IN 46556

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Research Interests Homotopy theory, especially in computational and chromatic aspects, with tools from equivariant and motivic homotopy theory.

Education

University of Notre Dame — Indiana, USA
Ph.D. candidate in Mathematics — 2020-present
Advisor: Mark Behrens

Peking University — Bejing, China
B.S. in Mathematics — 2016-2020
Advisor: Houhong Fan

Papers

A proof of the generalized geometric boundary theorem using filtered spectra. 2024. To appear in *Topology and its Applications.* arXiv:2309.14650

The Borel and genuine C_2-equivariant Adams spectral sequences. Last updated: 05/23/2024. arXiv:2208.12883

Talks

The Borel and genuine C_2-equivariant Adams spectral sequences.
Notre Dame Graduate Student Topology Seminar — 03/2024

The Borel and genuine C_2-equivariant Adams spectral sequences.
UCSD Topology Seminar — 02/2024

The Borel and genuine C_2-equivariant Adams spectral sequences.
AMS Sectional Meeting Special Session on Homotopy Theory — 10/2023

The Borel and genuine C_2-equivariant Adams spectral sequences.
UCSD Topology Seminar — 03/2023

Teaching Experience

Teaching Assistant, Homor Calculus III, University of Notre Dame — Fall 2023
Instructor, Calculus B, University of Notre Dame — Spring 2023
Teaching Assistant, Calculus II, University of Notre Dame — Fall 2022
Teaching Assistant, Linear Algebra and Differential Equations, University of Notre Dame — Spring 2022
Teaching Assistant, Calculus I, University of Notre Dame — Fall 2021
Teaching Assistant, Mathematical Analysis II, Peking University — Spring 2020
Teaching Assistant, Mathematical Analysis I, Peking University — Fall 2019

Undergraduate Research

The homotopy of tmf at the prime 2. PDF
Advised by Zhouli Xu — Summer 2019