

Sihao Ma
Curriculum Vitae
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RESEARCH INTERESTS Computational homotopy theory, especially in equivariant and chromatic aspects,
with the tools of motivic homotopy theory and synthetic spectra.

EDUCATION	University of Notre Dame Ph.D. candidate in Mathematics Advisor: Mark Behrens	Indiana, USA 2020-present
	Peking University B.S. in Mathematics Advisor: Houhong Fan	Beijing, China 2016-2020

PAPERS **Towards the $K(2)$ -local homotopy groups of $\mathbb{RP}^2 \wedge \mathbb{CP}^2 \wedge \mathbb{HP}^2$ at $p = 2$.** In preparations.

A proof of the generalized geometric boundary theorem using filtered spectra. [arXiv:2309.14650](https://arxiv.org/abs/2309.14650)

Topology and its Applications 355 (2024): 109006.

The Borel and genuine C_2 -equivariant Adams spectral sequences. [arXiv:2208.12883](https://arxiv.org/abs/2208.12883)

 Last updated: 09/10/2024.

TALKS **Towards the $K(2)$ -local homotopy groups of $\mathbb{RP}^2 \wedge \mathbb{CP}^2 \wedge \mathbb{HP}^2$ at $p = 2$.**

 AMS JMM Special Session on Homotopy Theory 01/2025

Towards the $K(2)$ -local homotopy groups of $\mathbb{RP}^2 \wedge \mathbb{CP}^2 \wedge \mathbb{HP}^2$ at $p = 2$.

 UIUC Topology Seminar 12/2024

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	Teaching Assistant, Honor Calculus III, University of Notre Dame	Fall 2023
EXPERIENCE	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	The homotopy of tmf at the prime 2.	PDF
RESEARCH	Advised by Zhouli Xu	Summer 2019