Jingyuan Zhu

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EDUCATION

Master Mathématiques et Appilcations Faculté des Sciences, Orsay, France Université Paris-Saclay, Mark: 17.62/20.00, with highest honors	September 2023 - September 2024
Bachelor of Science Department of Mathematical Sciences, Beijing, China Tsinghua University, CGPA: 3.76/4.00	August 2019 - June 2023
HSC Yueqing Zhilin High School, Wenzhou, China	September 2016 - June 2019
SSC Yuecheng Public Boarding School, Wenzhou, China	September 2013 - June 2016
RESEARCH INTERESTS	
higher category, higher algebra and their parametrised or equivariant variants; equivariant and nonequivariant stable homotopy theory; algebraic K -theory and Hermitian K -Theory; also homotopical algebra, easpecially model category.	

INTERNSHIP/TRAININGS

Ε	quivariant ∞ -Category and Real Topological Hochschild Homology	March 2024 - June 2024
N	laster thesis	
	This thesis generalised THR to the case of \mathbb{E}_{σ} algebra in C_2 - ∞ -category, using equivaria	nt factorisation homology,
	with also a tentative trial to give an equivariant analogue of the fibre sequence relating	THH and André–Quillen

cohomology.

· Supervised by Gabriel Angelini-Knoll and cosupervised by Geoffroy Horel at Paris 13.

Reading Seminar on Infinity Category

· A talk at the reading seminar on ∞ -category organised by Jordan Levin and Ran Azouri at Paris 13.

Nielsen Realisation Problem

 $Undergraduate \ Dissertation$

- · Investigated Teichmüller theory and Teichmüller geometry, mapping class group, and MMM classes; derived several representational results regarding Nielsen realisation problem.
- $\cdot\,$ Supervised by Weiyan Chen at Tsinghua University.

Morse Theory and its Applications

 ${\it Major\ Project\ as\ a\ part\ of\ a\ curriculum\ named\ Research\ Training\ Program}$

- $\cdot\,$ A research training project in collaboration with Zhongxian Cao
- $\cdot\,$ Explored the major content of Morse theory, deriving a proof of Bott periodicity theorem for U and O.
- $\cdot\,$ Mentored by Pin Yu at Tsinghua University.

A Report on Removable Singularities in Yang–Mills Fields

Minor Project as a part of curriculum

December 2022 - January 2023

December 2023 - March 2024 zouri at Paris 13.

October 2022 - June 2023

April 2022 - January 2023

 $\cdot\,$ A Report of an article by Karen K. Uhlenbeck.

A Report on the Existence of Harmonic Diffeomorphism from \mathbb{C} to \mathbb{D} November 2021 - December 2021 *Minor Project as a part of curriculum*

- · A Report of an article by P. Collin and H. Rosenberg, in collaboration with Jianqiao Shang et al.
- · Disproved Schoen's conjecture that there does not exist a harmonic diffeomorphism from $\mathbb C$ to $\mathbb D$.

HONORS/AWARDS

Sophie Germain Scholarship	2023-2024
Tsinghua XueTang Mathematics Program Scholarship	2021-2023
ST. Yau College Student Mathematics Contest 2022, Geometry and Topology,	
award of excellence	2022
ST. Yau College Student Mathematics Contest 2022, Algebra and Number Theory,	
award of excellence	2022
ST. Yau College Student Mathematics Contest 2021, Algebra and Number Theory,	
award of excellence	2021
China National High School Mathematics League,	
first prize	2018

LANGUAGES

Chinese (mother tongue), English (C1), French (A2), Japanese (N4)

DECLARATION

I hereby declare that all the details furnished above are true to the best of my knowledge and belief.