

Hongxiang Zhao

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Citizenship: China

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Education

University of Copenhagen (KU), Denmark

Master in Mathematics, Sep. 2023 – present (expected Jun. 2025)

Advisor: Robert Burklund

Southern University of Science and Technology (SUSTech), China

Bachelor in Science, major in Mathematics (Honor program), Sep. 2019 – Jun. 2023

Advisor: Yifei Zhu

University of California-Berkeley (UCB), USA

Concurrent Enrollment, Jan. 2022 – May. 2022

Research Interests

homotopy theory, number theory, and related fields, especially the relationship between the two fields. In particular, I am interested in chromatic homotopy theory, algebraic K-theory, as well as learning p -adic geometry.

Preprints

*A proof for Ando's theorem on norm-coherent coordinates
via the Coleman norm operator,*

arXiv:2310.09837

Academic Activities

Berkeley Mathematics Directed Reading Program Read Chapter I, II, III, IV, VI of Silverman's <i>The Arithmetic of Elliptic Curves</i>	Feb. 2022 – May. 2022
Undergraduate Topology Seminar on modular forms, SUSTech	Sep. 2022 – Dec. 2022
Graduate Topology Seminar, SUSTech	Sep. 2022 – May. 2023
Arithmetic and Topology (online conference), SUSTech	16 Dec. – 17 Dec. 2022
Short course: "Mordell–Weil Theorem", Xiamen University, taught by Qing Liu at University of Bordeaux	15 Jun. – 19 Jun. 2023
IWoAT 2023, Beijing	Summer 2023
Mini-workshop on BMS2, SUSTech	7 Aug. – 9 Aug. 2023

Masterclass: Arakelov geometry on Shimura varieties, KU	28 Aug. – 1 Sep. 2023
Masterclass: Homotopical methods in manifold theory, KU	15 Apr. – 19 Apr. 2024
Course: Eigenvarieties and Bloch–Kato Selmer Groups, KU	27 May. – 31 May. 2024
Masterclass: Continuous K-theory, dualizable and rigid categories, KU	10 Jun. – 14 Jun. 2024
IWoAT 2024, Fudan University	23 Jun. – 6 Jul. 2024
Homotopy theory problem solving seminar, KU	May. 2024 – present

GPA

GPA at KU	12/12
Major GPA at SUSTech	3.95/4.00
Major Ranking at SUSTech	1/47
GPA at UCB	4.00/4.00
Overall Cumulative GPA at SUSTech	3.92/4.00

Awards

The Danish governmental scholarship, 2023
 The Second Class of the Merit Student Scholarship at SUSTech, 2022
 The Second Class of the Merit Student Scholarship at SUSTech, 2021
 The Second Prize of the Chinese Mathematics Competition, 2021
 The First Class of the Merit Student Scholarship at SUSTech, 2020

Skills

Languages	Chinese (native) English (TOEFL 104: Reading 29, Listening 27, Speaking 23, Writing 25, GRE 327+3.5: Verbal 157, Quantitative 170, Writing 3.5)
Programming Languages	C++, JAVA, L ^A T _E X