

Baiqing Zhu

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EDUCATION

09/2020 - **Ph.D. candidate in Mathematics** at Columbia University
Advisor: Prof. Chao Li

09/2016 - 07/2020 **B.S. in Mathematics** at Fudan University

RESEARCH INTERESTS

Number Theory, Automorphic Forms, Arithmetic Geometry

PAPERS / PREPRINTS

1. Arithmetic Siegel-Weil formula on $\mathcal{X}_0(N)$. Preprint, arXiv:2304.10696.
2. Arithmetic Siegel-Weil formula on $\mathcal{X}_0(N)$: singular terms. Preprint, arXiv:2401.06368.
3. The regularity of difference divisors. Preprint, arXiv:2307.05239.

SELECTED TALKS

2024

- *The full arithmetic Siegel-Weil formula on $\mathcal{X}_0(N)$* , AIM workshop on Arithmetic intersection theory on Shimura varieties.

2023

- *Arithmetic Siegel-Weil formula on $\mathcal{X}_0(N)$* , Number Theory seminar. University of Wisconsin - Madison, Madison.
- *Arithmetic Siegel-Weil formula on $\mathcal{X}_0(N)$* , BSD conjecture and special values of L -functions. Tianyuan International Mathematics Research Center, Kunming.
- *Arithmetic Siegel-Weil formula on $\mathcal{X}_0(N)$* , Number theory seminar. SCMS, Fudan University, Shanghai.
- *Arithmetic Siegel-Weil formula on $\mathcal{X}_0(N)$* , Morningside Center of Mathematics, Beijing.

2022

- *Partial induction theorem*, Graduate Student Number Theory Seminar at Columbia University
- *Integral models of PEL-type shimura varieties*, Graduate Student Number Theory Seminar at Columbia University
- *Iwasawa main conjecture for totally real fields*, Graduate Student Number Theory Seminar at Columbia University

2021

- *p-adic Hecke L-functions*, Graduate Student Number Theory Seminar at Columbia University
- *Deformation of abelian varieties and algebraic groups*, Graduate Student Algebraic Geometry Seminar at Columbia University

TEACHING EXPERIENCE

<i>Fall 2021</i>	Teaching Assistant, MATH 1101 Calculus I
<i>Spring 2022</i>	Teaching Assistant, MATH 1102 Calculus II
<i>Summer 2022</i>	Teaching Assistant, MATH 1102 Calculus II (two sections)
<i>Fall 2022</i>	Teaching Assistant, MATH 1102 Calculus II (two sections)
<i>Spring 2023</i>	Teaching Assistant, MATH 1102 Calculus II
<i>Summer 2023</i>	Instructor, MATH 1202 Calculus IV.
<i>Fall 2023</i>	Teaching Assistant, MATH 1201 Calculus III (two sections)
<i>Spring 2024</i>	Instructor, MATH 1003 College Algebra - Analytic geometry.

HONORS

<i>07/2020</i>	Outstanding student of Distinguished Undergraduate Program
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LANGUAGE

<i>Chinese</i>	mother tongue
<i>English</i>	fluent