Name: Peihang Wu   Email :wuph@pku.edu.cn

EMPLOYMENT

Boya Postdoctoral Fellow, BICMR, mentor: Liang Xiao   Oct. 2024 - present

EDUCATION

University of Minnesota, Twin Cities   Minneapolis, MN, USA
Ph.D. in Mathematics   *Sep. 2018 – Aug. 2024*
- Advisor: Kai-Wen Lan
- Thesis: Arithmetic Compactifications of Integral Models of Shimura Varieties of Abelian Type

Fudan University   Shanghai, China
B.S. in Mathematics   *Sep. 2014 – Jun. 2018*
- Senior Thesis Mentor: Shanwen Wang

RESEARCH INTERESTS

Current research areas:

- Geometry of integral models of Shimura varieties and their compactifications

- Cohomology of automorphic sheaves on Shimura varieties and their compactifications

WRITINGS

- Arithmetic compactifications of integral models of Shimura varieties of abelian type, arxiv:2505.09135

- Canonical extensions of p-adic shtukas on toroidal compactifications of Shimura varieties (with Shengkai Mao), upcoming

INVITED TALKS

Compactifications of integral models of Shimura varieties of abelian type   Oct. 29 and 31, 2024
- One introductory talk and one research talk at Morningside Center of Mathematics

Number theory and representation theory seminar at Zhejiang University   Dec. 3, 2025
- Canonical extensions of p-adic shtukas

TEACHING

Teaching at Peking University   Fall 2024 - present
- No teaching assignments currently

Teaching at UMN   Fall 2018 - Spring 2024
- Spring 2024, Math1272 Section 013 and 014, TA[1]
- Fall 2023, Math1271 (calculus I) Secion 002, instructor of record
- Spring 2023, Math2374 Section 021, 022, 023 and 024 (on Mathematica programming), TA
- Fall 2022, Math2374 Section 012 and 013, TA
- Summer 2022, Math1272 (calculus II) Section 003, instructor of record
- Spring 2022, Math2373 Section 014 and Section 023, TA

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[1]TA=instructor for discussion sessions, instructor=instructor for lecture sessions.

- Fall 2021, Math2374 Section 012 and 013, TA
- Spring 2021, Math2373 (linear algebra and differential equations) Section 013 and 031, TA
- Fall 2020, Math2374 Section 014, TA
- Fall 2019, Math2374 (multi-variable calculus) Section 012 and 014, TA
- Spring 2019, Math8301 (manifolds and topology), Math4242 (applied linear algebra, 2 sections), grader
- Fall 2018, Math8201 (general algebra), Math8301 (manifolds and topology), Math4242 (applied linear algebra, 3 sections), grader

Teaching at Fudan University <div align="right">Spring 2018</div>
- Spring 2018, grader for real analysis

(ONLINE) CONFERENCES AND WORKSHOPS ATTENDED

- The Sixth Abel Conference, Nov. 2018, UMN

- Arizona Winter School 2020: Nonabelian Chabauty, Mar. 2020, University of Arizona

- Cross Atlantic Representation Theory and Other topics ONline conference, May 2020, online

- Arizona Winter School 2022: Automorphic Forms Beyond GL_2 (registered virtually), Mar. 2022, University of Arizona

- Summer School and Workshop on Relative Langlands Duality, Jun. 2024, UMN

- p-adic Methods in Number Theory and Arithmetic Geometry, Nov. 2024, Tianyuan Mathematics Research Center

- Arithmetic Geometry in Shenzhen, Dec. 2024, SUSTech

- New Tools in the Local and Global Langlands Programs, Jul. 2025, Hangzhou

- Arithmetic Geometry in Shenzhen II, Nov. 2025, SUSTech