HAODONG YAO

Contact

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Education

09/2019-   Ph.D. candidate in Mathematics at Columbia University

                Advisor: Prof. [Chao Li](#)

09/2015-07/2019   B.S. in Mathematics at University of Chinese Academy of Sciences

Research Interests

Arithmetic Geometry, Automorphic Forms

Papers

Kudla-Rapoport Conjecture for Odd Exotic Smooth Models, in preparation

Teaching Experience

Fall 2022   Instructor, Math 1102 Calculus II

Summer 2023   Instructor, Math 1102 Calculus II

Expository Talks

"*Derived patching*", GSNTS on Derived Galois Deformation Rings, Mar. 2020

"*Diamond I*", Student Arithmetic Geometry Reading Seminar (UMN), Dec. 2020

"*P-adic properties of modular schemes and modular forms*", GSNTS on p-adic Modular Forms and p-adic L-functions, Mar. 2021

"*Classicality mod p*", GSNTS on Higher Hida Theory, Aug. 2021

"*Artin's axioms for algebraic stacks*", Graduate Student Algebraic Geometry Seminar on Deformation Theory, Nov. 2021

"*Equivalence of conditions*", GSNTS on Norm Residue Isomorphism Theorem, Nov. 2021

"*Hilbert-Blumenthal Moduli*", GSNTS on p-adic Automorphic Forms on Shimura Varieties, Feb. 2022

"*Taylor-Wiles patching and connections to p-adic Langland*s", GSNTS on p-adic Langlands, Sep. 2022

"*Hida theory for GL(2) over totally real fields*", GSNTS on Eisenstein series and related arithmetic topics, Oct. 2022

Conferences Attended

"Arizona Winter School 2020: Nonabelian Chabauty", March 7-11, 2020, at the University of Arizona in Tucson, AZ, USA.

"The Eighth National Number Theory Conference (in Jintan)", June 26-30, 2021, by Hua Loo-Keng Center for Mathematical Sciences, at Jintan, Jiangsu, China.

"Theta Series: Representation Theory, Geometry, and Arithmetic", July 5-9, 2021, at the Fields Institute (online).

"Conference on Arithmetic Geometry in honor of Luc Illusie", July 7-11, 2021, online.

"Summer School: From Modular Forms to Shimura Varieties, an Introduction", July 26-30, 2021, at Beijing International Center for Mathematical Research, Beijing, China.

"Arizona Winter School 2022: Automorphic Forms Beyond GL_2", March 5-9, 2022, at the University of Arizona in Tucson, AZ, USA.

"2022 Summer School on the Langlands program", July 11-29, 2022, at IHES (remote participant).

"MSRI Workshop on Shimura Varieties and L-Functions", March 13-17, 2023, at MSRI, California, USA.

To attend:

"AIM Workshop on Arithmetic intersection on Shimura varieties", January 8-12, 2024, at Caltech, Pasadena, California, USA.