Curriculum Vitae

Qiao He

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INFORMATION University of Wisconsin-Madison. Homepage:

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Madison, WI 53706

EDUCATION 09/2017-Now, Ph.D., Mathematics,

University of Wisconsin-Madison. Advisor: Tonghai Yang.

09/2015-12/2016, M.A., Mathematics, University of Wisconsin-Madison.

09/2011-06/2015, B.A., Investment, Statistics (Minor),

Shanghai University of Finance and Economics.

Publications Kudla-Rapoport conjecture at a ramified prime

(With Yousheng shi and Tonghai Yang), preprint, 2021.

Just likely intersections on Hilbert modular surface

(With Asvin Gothandaraman and Ananth Shankar), in preparation, 2021.

Kudla program for unitary Shimura varieties (With Yousheng shi and Tonghai Yang),

Sci Sin Math, 2021, 51: 1595–1626, doi: 10.1360/SSM-2021-0002,

The Kudla-Rapoport conjecture at a ramified prime for U(1,1)

(With Yousheng shi and Tonghai Yang), Transactions of the AMS, to appear.

On Conjectures of Samart

(With Dongxi Ye), manuscripta math, to appear.

Awards Excellence in Graduate Research Award, Department of Mathematics, UW-Madison

Talks "Kudla-Rapoport conjecture at a ramified prime", Number theory Seminar, UW-

Madison, Sep. 2021

"Supersingular locus of Unitary Shimura variety", GNTS, UW-Madison, Feb. 2021

"Local Arithmetic Siegel-Weil Formula at Ramified Prime", GNTS, UW-Madison,

Sep. 2020

"Kontsevich's Formula for Rational Plane Curves", GAGS, UW-Madison, Feb. 2020

"Representation theory and arithmetic geometry", GNTS, UW-Madison, Jan. 2020

"Modularity theorem for Elliptic curves", GNTS, UW-Madison, Oct. 2019

"L-functions, Heegner points and Euler systems", GNTS, UW-Madison, Feb. 2019

- "Basics of trace formula", GNTS, UW-Madison, Oct. 2018
- "An elementary introduction to geometric Langlands", GAGS, UW-Madison, Oct. 2018
- "An introduction to automorphic representation II", GNTS, UW-Madison, Apr. 2018
- "An introduction to automorphic representation I", GNTS, UW-Madison, Apr. 2018

CONFERENCES ATTENDED

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

"CMS summer meeting 2021", June 8-10, hold online.

"Arizona Winter Semester 2021: Virtual School in Number Theory", hold online, work as an assistant for Renee Bell.

"Madison Moduli Weekend Online", September 26-27, 2020, at the University of Wisconsin-Madison (online).

"AMS Sectional Meeting", September 14-15, 2019, at the University of Wisconsin-Madison.

"Hot Topics: Recent progress in Langlands Program", April 8-12, 2019 at MSRI.

"Arizona Winter School 2019: Topology and Arithmetic", March 2-6, 2019 at the University of Arizona in Tucson.

"Geometry and Arithmetic of Surfaces Workshop", February 9-10, 2019, at the University of Wisconsin-Madison.

"Pop-up Conference in Number Theory", UIC, Nov. 2-4, 2018 at UIC.

"Automorphic Forms and L-functions— A Conference in Celebration of Dorian Goldfeld's 71st Birthday", June 18-22, 2018 at Shandong University.

"Arithmetic of Algebraic Curves", April 6-8, 2018 at the University of Wisconsin-Madison.

"Summer School on Representation Theory and the GGP Conjecture", June 26-30, 2018, at BICMR

"Arizona Winter School 2018: Iwasawa Theory", March 3-7, 2018 at the University of Arizona in Tucson.