Xiaojiang Cheng

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Research Interests

Algebraic geometry and Hodge theory
Representation theory and automorphic forms

Education

Washington University in St. Louis — September 2018– Present
Ph.D. in Mathematics (expected May 2024); Advisor: Matt Kerr — *Saint Louis, MO, 63130*

University of Science and Technology of China — September 2015- June 2018
Advisor: Mao Sheng — *Hefei, Anhui, China*

University of Science and Technology of China — September 2011-June-2015
B.A. in Mathematics — *Hefei, Anhui, China*

Publications and Preprints

1. Hodge classes in the cohomology of local systems. preprint 2023.

Expository Notes

Automorphic Forms and the Langlands Program.
Trace Formula.

Talks

Hodge classes in the cohomology of automorphic local systems, Algebraic Geometry Seminar at WashU - Apr. 2021
Hodge Classes in the Cohomology of Local Systems, Chongqing University of Technology, Dec. 2023

Conferences Attended

Western Algebraic Geometry Symposium, November 4-5, 2023, St. Louis.
Arizona Winter School: Unlikely Intersections, March 4-8 2023, Tucson.
Algebraic Geometry and Algebraic K-Theory, May 23-25 2022, St. Louis.
MSRI Summer Graduate School: Commutative Algebra and its Interaction with Algebraic Geometry, June 3-14, 2019, University of Notre Dame.
Symposium on Hodge Theory, Arithmetic, and Moduli, May 13-17 2019, University of British Columbia, Canada.

Teaching

Instructor:

- Calculus III, SU21

Teaching Assistant:

- Calculus III, FL23
- Calculus II, FL21
- Calculus I, FL19

Grader:

- Algebraic Geometry, SP22.
- Measure Theory and Functional Analysis I and II, FL20-SP21.
- Algebra I and II, FL20-SP21.
- Introduction to Lebesgue Integration, SP20.

Last updated: November 2023