

# Xiaojiang Cheng

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## Research Interests

Algebraic geometry and Hodge theory  
Representation theory and automorphic forms

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## Education

<b>Washington University in St. Louis</b> <i>Ph.D in Mathematics (expected May 2024); Advisor: Matt Kerr</i>	September 2018– Present Saint Louis, MO, 63130
<b>University of Science and Technology of China</b> <i>Advisor: Mao Sheng</i>	September 2015- June 2018 Hefei, Anhui, China
<b>University of Science and Technology of China</b> <i>B.A. in Mathematics</i>	September 2011-June-2015 Hefei, Anhui, China

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## Publications and Preprints

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

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## Talks

Hodge classes in the cohomology of automorphic local systems, Algebraic Geometry Seminar at WashU - April 2021

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## 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.

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## Teaching

Instructor:

- Calculus III, SU21

Teaching Assistant:

- Calculus III, FL23 Instructors: Minh Nguyen, Blake Thornton, and Brett Wick

- Calculus II, FL21  
Instructor: Karl Schaefer
- Calculus I, FL19  
Instructor: Silas Johnson

Grader:

- Algebraic Geometry, SP22.  
Instructor: Matt Kerr
- Measure Theory and Functional Analysis I and II, FL20-SP21.  
Instructor: Francesco Di Plinio
- Algebra I and II, FL20-SP21.  
Instructor: Matt Kerr
- Introduction to Lebesgue Integration, SP20.  
Instructor: Francesco Di Plinio.

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Last updated: November 2023