

CURRICULUM VITAE

Zeyu Wang

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Contact

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Mathematical Interests

I am interested in geometric representation theory, number theory, and algebraic geometry. Currently, I am working towards understanding the intersection number of special cycles on the moduli of shtukas via (relative) geometric Langlands.

Advisor

Zhiwei Yun

Education

2019-2023, B.S. in Mathematics, Peking University.

2023-current, Ph.D. in Mathematics, Massachusetts Institute of Technology.

Awards

2018, **Gold Medal**, 59th International Mathematical Olympiad.

2022, **Gold Medal**, *Algebra, Number Theory and Combinatorics*, 13th S.-T.Yau college students mathematics contest.

2022, **Gold Medal**, *Team Medals*, 13th S.-T.Yau College students' mathematics contest.

Prepublications

1. Special Cycle on Shtukas and Categorical Trace, in preparation.
2. Higher Period Integrals and Derivatives of L-functions (joint with Shurui Liu), preprint on arXiv, <https://arxiv.org/abs/2504.00275>.
3. Appendix to "On the relative Langlands duality for $\mathrm{Sp}_{2n} \backslash \mathrm{GL}_{2n+1}$ " by Guodong Xi and Weixiao Lu, preprint on arXiv, <https://www.arxiv.org/abs/2504.18774>.

Invited Talks

April 2025, *Higher Derivatives of L-functions via Rankin-Selberg convolution*, at UChicago Representation Theory Seminar.

July 2025, *Higher Derivatives of L-functions via Rankin-Selberg convolution*, at Shanghai Institute for Mathematics and Interdisciplinary Sciences.

September 2025, *Intersection number of Rankin-Selberg cycles*, at Johns Hopkins Number Theory Seminar.