Zifan Wang (Atticus)

I am a 3rd year undergraduate student at MIT studying mathematics.

Education

2018–2022 Princeton International School of Mathematics and Science
2022–2026 Massachusetts Institute of Technology, B.S. (expected)

Awards & experience

2021 Gold Medal, International Mathematical Olympiad
2021 Winner (perfect score), USA Mathematical Olympiad
2021 Silver Medal, Asian Pacific Mathematical Olympiad
2022 Top 40 Finalist, Regeneron Science Talent Search
2023 Participant at the MIT SPUR program
2024 Participant at the Talbot Workshop: Topological Cyclic Homology of Ring Spectra
2024 Organizer, Learning seminar on prismatic cohomology.
2025 Scholar at ML Alignment & Theory Scholars (MATS).

Papers & preprints

2020–2021 Representation Stability and Finite Orthogonal Groups. With Arun Kannan. *Algebras and Representation Theory* (2023). arXiv:2202.09910 [math.RT]. Work done during PRIMES-USA.

2023 On the Analytic Langlands Corrrespondence for PGL_2 in Genus 0 with Wild Ramification. With Daniil Klyuev. arXiv:2312.01030 [math.AG]. Work done during SPUR.

2024 Rewarded Region Replay (R3) for Policy Learning with Discrete Action Space. With Bangzheng Li, Ningshan Ma. arXiv:2405.16383 [cs.LG].

2025 Breakpoint: Scalable evaluation of system-level reasoning in LLM code agents. With Uzay Girit, Kaivalya Hariharan. *COLM* (2025). arXiv:2506.00172 [cs.LG].

2025 Simple Mechanistic Explanations for Out-Of-Context Reasoning. With Josh Engels, Oli Clive-Griffin. *ICML Workshop R2-FM* (2025). arXiv:2507.08218 [cs.LG].

Talks

2023 Moduli space of abelian varieties, STAGE
2024 Integrable connections, STAGE
2025 Milnor's exotic 7-spheres, Kan seminar
2025 Equivariant cohomology of compact Lie groups, Kan seminar

Last updated: July 22, 2025