

Kabir Rohit Khanna

Education

- Sep 2023 – Present **University of Massachusetts** *Amherst, Massachusetts*
PhD in Physics | **Advisor:** Romain Vasseur
- Oct 2022 - Jun 2023 **University of Oxford** *Wadham College, Oxford, UK*
MSc. Mathematical and Theoretical Physics
Overall grade: Distinction
Thesis: Long Range Entanglement via Anomalies From Measurements
- Aug 2017 – May 2022 **Indian Institute of Technology Madras** *Chennai, Tamil Nadu*
Dual Degree - B.Tech in Engg. Design + M.Tech in Quantum Science & Technology
CGPA: 9.41/10 | **Rank:** 3/57
Thesis: Aspects of Quantum Information in Curved Spacetimes

Publications/Preprints

- [1] *[In preparation]* **Kabir Khanna**, Abhishodh Prakash, and Siddharth Parameswaran, *Long-Range Entanglement from Trivial States Through Anomaly Imprinting Measurements*
- [2] **Kabir Khanna**, Romain Vasseur, and Andreas W. W. Ludwig *Random Quantum Circuits with Time-Reversal Symmetry* (2025). <https://doi.org/10.48550/arXiv.2501.13161>
- [3] Raghvendra Singh, **Kabir Khanna**, and Dawood Kothawala, *Decoherence due to Spacetime Curvature*, arXiv (2023). <https://doi.org/10.48550/arXiv.2302.09038>
- [4] **Kabir Khanna** and Saurya Das, *GUP Corrections to the Jaynes-Cummings Model*, arXiv (2022). <https://doi.org/10.48550/arXiv.2209.10152>

Talks

- [1] APS March Meeting 2025, *Random Quantum Circuits with Time-Reversal Symmetry*.

Awards and Recognitions

- 2023 Awarded the Graduate Fellowship worth \$5000 by UMass Amherst.
- 2022 OCSI Scholarship awarded by the Oxford Cambridge Society of India.
- 2021 Awarded[§] the DAAD WISE Research Scholarship.
- 2019 Awarded partial funding to attend the Wolfram Summer School at Waltham, Massachusetts.
- 2018 Awarded the best volunteer at NSS IITM.
- 2017 Silver medal for obtaining a top 4000 rank in JEE Advanced 2017 out of 1.2 million students.
- 2015 Awarded the best outgoing student from school, DPS Secunderabad.

Teaching and Volunteering

- Feb 2024 - May 2024 **Teaching Assistant for Astronomy 105 - Weather** *UMass Amherst*
- Sept 2023 - Dec 2023 **Teaching Assistant for Phys 118 - Weather and Our Atmosphere** *UMass Amherst*
- Jan 2022 - May 2022 **Teaching Assistant for PH3520 Quantum Physics** *IIT Madras, Chennai*
- May 2018 - Jul 2018 **Mathematics and Physics Tutor** *Lamdon School, Leh*

[§]Did not accept.