

Kabir Rohit Khanna

Education

Sep 2025 – Present **University of Geneva** *Geneva, Switzerland*
PhD in Physics | **Advisor:** Romain Vasseur

Sep 2023 – Sep 2025 **University of Massachusetts** *Amherst, Massachusetts*
PhD in Physics (discontinued) | **Advisor:** Romain Vasseur
Relocated to University of Geneva with supervisor.

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] **Kabir Khanna**, Romain Vasseur *Universal Statistics of Measurement-Induced Entanglement in Tomonaga-Luttinger liquids* (2025). <https://doi.org/10.48550/arXiv.2512.13809>
- [2] **Kabir Khanna**, Romain Vasseur *Measurement-Induced Entanglement in Conformal Field Theories* (2025). <https://doi.org/10.48550/arXiv.2508.02788>
- [3] **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>
- [4] Raghvendra Singh, **Kabir Khanna**, and Dawood Kothawala, *Decoherence due to Spacetime Curvature*, arXiv (2023). <https://doi.org/10.48550/arXiv.2302.09038>

Invited/conference Talks and Lectures

- [1] Swiss Quantum Days, Jan 2026, *Measurement-Induced Entanglement in Gapless Quantum Matter*.
- [2] HRI Allahabad, Aug 2025, *Lectures on Random Quantum Circuits and their stat-mech*.
- [3] HRI Allahabad, Aug 2025, *Measurement-Induced Entanglement in Conformal Field Theory*.
- [4] 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.

[§]Did not accept.

2015 Awarded the best outgoing student from school, DPS Secunderabad.

Teaching and Volunteering

Feb 2026 - May 2026 **Teaching Assistant for Mathematical Methods 2** *University of Geneva*

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*