

# 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<sup>§</sup> 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.

---

<sup>§</sup>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*