

HASSAAN SALEEM

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[Inspire](#) \diamond [Google Scholar](#) \diamond [LinkedIn](#)

RESEARCH INTERESTS

- String theory; String Compactifications
- Conformal Field Theory (CFT); 2D CFT and boundary CFT
- Information-based approaches to physics

EDUCATION

- Ph.D. in Theoretical Physics, SUNY Albany, Albany, New York Aug 2020 - Present
 - Ph.D. Dissertation: In preparation
 - Doctoral Advisor: Dr. Daniel Robbins
- Master of Science in Physics, SUNY Albany, New York Aug 2020 - May 2023
 - Relevant Coursework: QFT, Introduction to String Theory
 - Academic Advisor: Dr. Daniel Robbins
- HECAP Postgraduate diploma, ICTP, Trieste, Italy Sep 2019 - Aug 2020
 - Relevant Coursework: Lie Algebras, QFT, GR & Cosmology and The Standard Model
 - Master Thesis: [Magnetic Monopoles, duality and Supersymmetry](#)
 - Thesis advisor: Dr. K.S. Narain
- Master of Science in Physics, University of the Punjab Oct 2018 - Dec 2020
 - Relevant Coursework: QFT, The Standard Model, Computational Physics
 - Thesis: [Review of Seiberg Witten duality](#)
 - Thesis Advisor: Dr. Bushra Haider
- Bachelors of Science in Physics, University of the Punjab Oct 2014 - May 2018

LIST OF PUBLICATIONS

- Daniel Robbins and Hassaan Saleem. “ $O(16)\times O(16)$ heterotic theory on $AdS_3 \times S^3 \times T^4$ ”. In: (Oct. 2025). arXiv: [2510.20915 \[hep-th\]](#) (accepted in JHEP)
- Yucong Cai, Daniel Robbins, and Hassaan Saleem. “Constraining boundary conditions in non-rational CFTs”. In: (Mar. 2025). arXiv: [2504.00367 \[hep-th\]](#)
- Ariel Caticha and Hassaan Saleem. “Entropic Dynamics Approach to Relational Quantum Mechanics”. In: *Entropy* 27.8 (2025), p. 797. DOI: [10.3390/e27080797](#). arXiv: [2506.07921 \[quant-ph\]](#)
- Daniel Robbins and Hassaan Saleem. “ $O(16)\times O(16)$ heterotic theory at ADE points”. In preparation
- Ivano Basile, Daniel Robbins, and Hassaan Saleem. “(Non-)perturbative stability of $O(16)\times O(16)$ heterotic theory on $AdS_4 \times S^3 \times S^3$ ”. In preparation

CONFERENCES AND WORKSHOPS ATTENDED

- Eurostrings 2024, University of Southampton, UK Sep 2024
- Simons Physics Summer [Workshop](#), SCGP, SUNY Stony Brook, NY, USA Aug 2025

EXPERIENCE

- **Teaching assistant**, SUNY Albany, Albany, New York Aug 2020 - July 2024
Responsibilities: Teaching first and second-year undergraduate physics labs, grading lab reports, and grading homeworks for graduate physics courses.
- **Adjunct Professor**, SUNY Albany, Albany, New York July 2024 - December 2025
Responsibilities: Teaching physics courses and assisting TAs in their grading duties.
- **Research assistant**, SUNY Research foundation, Albany, New York May 2025 - Aug 2025
Responsibilities: Contributing to research on the symmetry enhancement in $c = 1$ conformal field theories
- **Teaching assistant**, SUNY Albany, Albany, New York Jan 2026 - Present
Responsibilities: Teaching first and second-year undergraduate physics labs, grading lab reports, and grading homeworks for graduate physics courses.

INVITED TALKS

- Eurostrings 2024: Parallel session [talk \(Recording\)](#) Sep 2024
- OIST, Okinawa, Japan: Quantum Gravity seminar [talk \(Recording\)](#) Feb 2026
- McGill University, Montreal, Canada: Theory HEP seminar [talk \(Recording\)](#) Mar 2026
- ‘Stringy Seminars’ series: Seminar talk ([Recording](#)) Mar 2026
- Masaryk University, Czechia: Theory seminar (Coming Up) Apr 2026
- String-Pheno seminar series (Coming Up) May 2026

ACADEMIC SERVICES

- **Physics graduate student Liaison**, SUNY Albany, Albany, New York May 2023 - July 2024
Responsibilities: Reporting the concerns and suggestions from graduate students to the physics graduate committee and representing the graduate student body on various occasions.
- **Lecturer for ICTP Physics Without Frontiers**, [School](#) on GR and Cosmology May-July 2025
Recordings of the lectures: [Lecture 5](#), [Lecture 6](#), [Lecture 7](#), [Lecture 8](#)

AWARDS RECEIVED

- Excellence in Comprehensive Exam Performance Award May 2021
by Department of Physics, SUNY Albany.
- Best student talk award at 2023 PASCAL conference, Dec 2023
at Department of Physics, SUNY Albany.

SCIENTIFIC OUTREACH

- I make videos essays and other videos on my [YouTube channel](#) about Physics and Mathematics. These videos also include lecture videos for topics in theoretical physics. I also host a podcast on my channel named [PhyMaths Podcast](#) to discuss cutting-edge topics in theoretical physics and adjacent areas with the researchers working in these areas. In addition, I have the following appearances for the purpose of scientific outreach
 - [Session](#) on Kainaat Astronomy
 - [Discussion](#) to push back against physics misinformation
 - Interactive [session](#) about quantum gravity with students at PIEAS, Pakistan
 - [Appearance](#) on [Desi Academia podcast](#) to discuss theoretical physics

- Several appearances [[1](#), [2](#), [3](#), [4](#)] to explain physics to students and lay audience
- I write popular science articles in some newspapers/magazines (e.g. [this article](#)), on my [blog](#), which is found on my [website](#). I also convert these articles to [Twitter threads](#) for a wider reach.

OTHER INTERESTS

- Other than physics and mathematics, I am very interested in moral and political philosophy, philosophy of science, and other related topics. My reading list is available on my [Goodreads account](#).