

# HASSAAN SALEEM

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

## RESEARCH INTERESTS

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- String Theory
- String compactifications and the Swampland Program
- Conformal Field Theories

## EDUCATION

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- 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

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- Daniel Robbins and Hassaan Saleem. “ $O(16) \times O(16)$  heterotic theory on  $AdS_3 \times S^3 \times T^4$ ”. In: *JHEP* 03 (2026), p. 212. DOI: [10.1007/JHEP03\(2026\)212](https://doi.org/10.1007/JHEP03(2026)212). arXiv: [2510.20915](https://arxiv.org/abs/2510.20915) [[hep-th](#)]
- Ivano Basile, Daniel Robbins, and Hassaan Saleem. “Non-supersymmetric heterotic strings on  $AdS_4 \times S^3 \times S^3$ ”. In: (Apr. 2026). arXiv: [2604.18692](https://arxiv.org/abs/2604.18692) [[hep-th](#)]
- Yucong Cai, Daniel Robbins, and Hassaan Saleem. “Constraining boundary conditions in nonrational CFTs”. In: *Phys. Rev. D* 113 (10 2026), p. 106017. DOI: [10.1103/44rr-dz2y](https://doi.org/10.1103/44rr-dz2y). URL: <https://link.aps.org/doi/10.1103/44rr-dz2y>
- Ariel Caticha and Hassaan Saleem. “Entropic Dynamics Approach to Relational Quantum Mechanics”. In: *Entropy* 27.8 (2025), p. 797. DOI: [10.3390/e27080797](https://doi.org/10.3390/e27080797). arXiv: [2506.07921](https://arxiv.org/abs/2506.07921) [[quant-ph](#)]
- Daniel Robbins and Hassaan Saleem. “ $O(16) \times O(16)$  heterotic theory at  $ADE$  points”. In preparation

## CONFERENCES AND WORKSHOPS ATTENDED

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- Eurostrings 2024, University of Southampton, UK Sep 2024

- 22nd Simons Physics Summer [Workshop](#), SCGP, SUNY Stony Brook, NY, USA Aug 2025
- Physical Mathematics Summer [School](#), UMass Amherst, MA, USA Jul 2026
- 23rd Simons Physics Summer [Workshop](#), SCGP, SUNY Stony Brook, NY, USA Aug 2026

## EXPERIENCE

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- **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

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- 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 ([Recording](#)) Apr 2026
- String Pheno series: Seminar talk ([Recording](#)) May 2026

## ACADEMIC SERVICES

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- **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 & HONORS RECEIVED

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- Excellence in Comprehensive Exam Performance Award, at Department of Physics, SUNY Albany. May 2021
- Best student talk award at 2023 PASCAL conference, at Department of Physics, SUNY Albany. Dec 2023
- Akira Inomata Award for excellence in theoretical Physics research, at Department of Physics, SUNY Albany. May 2026
- Full member at Sigma Xi Honorary Society. May 2026 - Present

## SCIENTIFIC OUTREACH

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- 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 done several appearances [[1](#), [2](#), [3](#), [4](#), [5](#), [6](#), [7](#), [8](#)] for the purpose of scientific outreach
- 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**

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- 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](#).