HASSAAN SALEEM

hsaleem@albany.edu ◇ Website
Inspire ◇ Google Scholar ◇ LinkedIn

RESEARCH INTERESTS

- String Theory (supersymmetric and non-supersymmetric)
- String compactifications and the swampland program
- Two dimensional Conformal Field Theories

EDUCATION

- Ph.D. in Theoretical Physics, SUNY Albany, Albany, New York — Jan 2021 - Present
  - Ph.D. Dissertation: In preparation
  - Doctoral Advisor: Dr. Daniel Robbins
- Master of Science in Physics, SUNY Albany, New York — Jan 2021 - May 2023
- HECAP Postgraduate diploma, ICTP, Trieste, Italy — Sep 2019 - Aug 2020
  - 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
  - Thesis: Review of Seiberg Witten duality
  - Thesis Advisor: Dr. Bushra Haider
- Bachelor of Science in Physics, University of the Punjab — Oct 2014 - May 2018

LIST OF PUBLICATIONS

- 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. URL: https://link.aps.org/doi/10.1103/44rr-dz2y
- Daniel Robbins and Hassaan Saleem. "O(16) × 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. arXiv: 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: *SciPost Phys.* 21 (2026), p. 028. DOI: 10.21468/SciPostPhys.21.1.028. URL: https://scipost.org/10.21468/SciPostPhys.21.1.028
- Daniel Robbins, Subham Roy, and Hassaan Saleem. *Boundaries of the compact free boson through edge modes and boundary SymTFT*. 2026. arXiv: 2609.30371 [hep-th]. URL: https://arxiv.org/abs/2609.30371
- Stevell Muller, Daniel Robbins, and Hassaan Saleem. *Six and seven dimensional extrema of Non-SUSY heterotic theory with non-maximal enhancements*. 2026. arXiv: 2610.31750 [hep-th]. URL: https://arxiv.org/abs/2610.31750
- 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]
- Ivano Basile et al. "Non-supersymmetric heterotic strings on AdS_5". In preparation

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 (Recording) — Apr 2026
- String Pheno series: Seminar talk (Recording) — May 2026
- PMQFTSS 2026: Gongshow talk — Jul 2026
- LUMS, Pakistan: Seminar talk (Recording) — Sep 2026
- (Upcoming) Northeastern University, Boston, USA: Journal club talk — Nov 2026
- (Upcoming) SCGP, Stony Brook, USA: Journal club talk — Nov 2026

CONFERENCES AND WORKSHOPS ATTENDED

- 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 (PMQFTSS), UMass Amherst, MA, USA — Jul 2026
- 23rd Simons Physics Summer Workshop, SCGP, SUNY Stony Brook, NY, USA — Aug 2026
- Mirror Symmetry, Calabi-Yau Threefolds, and Connections to Physics, ICERM, Brown University, Rhode Island, USA — Sep-Oct 2026

ACADEMIC SERVICES

- 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
- Mentor for ICTP Physics Without Frontiers' mentorship program — July - Oct 2026

AWARDS & HONORS RECEIVED

- 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

SCIENTIFIC OUTREACH

I am involved in several scientific outreach efforts. A list of them can be found here.