

# Prachi Garella

---

## CONTACT INFORMATION

Website: [www.prachigarella.com](http://www.prachigarella.com)  
Linkedin: [www.linkedin.com/in/prachigarella](http://www.linkedin.com/in/prachigarella)  
✉ E-mail: [prachigarella@prachigarella.com](mailto:prachigarella@prachigarella.com)

EDUCATION	<b>University of Houston</b> , College of Natural Sciences and Mathematics, Tx, USA. 2022–Present <ul style="list-style-type: none"><li>• PhD Candidate in the theoretical particle physics group. Advisor: Prof. Claudia Ratti</li></ul>
	<b>Durham University</b> , Ustinov College, Durham, UK. 2018–2019 <ul style="list-style-type: none"><li>• Postgraduation in Particles, Strings and Cosmology, Result: <b>Pass</b></li></ul>
	<b>Amity University Noida</b> , India. 2015–2018 <ul style="list-style-type: none"><li>• B.Sc(Honours) – Physics. Result: <b>First Division</b> CGPA: <b>6.82/10</b></li></ul>
	<b>Cambridge School, Srinivaspuri</b> , New Delhi, India. 2015–2018 <ul style="list-style-type: none"><li>• Higher Secondary (Major–Science) Result: <b>First Division</b> Percentile : <b>80.75</b></li></ul>
ADDITIONAL COURSES	<ul style="list-style-type: none"><li>• <b>101 Introduction to Cluster Computing.</b> August–October 2023 <i>University of Houston’s Hewlett Packard Enterprise Data Science Institute (HPE DSI).</i></li><li>• <b>Qiskit Global Summer School 2023.</b> July–August 2023 <i>IBM Quantum.</i></li><li>• <b>Dualities in Topology and Algebra.</b> 01–13 February 2021 <i>International Centre for Theoretical Sciences, TIFR.</i></li><li>• <b>Kavli Asian Winter School on Strings, Particles and Cosmology.</b> 10–23 January 2022 <i>International Centre for Theoretical Sciences, TIFR.</i></li><li>• <b>Nonperturbative and Numerical Approaches to Quantum Gravity, String Theory and Holography.</b> 18–22 January 2021 <i>International Centre for Theoretical Sciences, TIFR.</i></li></ul>
RESEARCH EXPERIENCE	<ul style="list-style-type: none"><li>• <b>The SYK Model, Conformal Field Theory.</b> Present Advisor: Prof. Carlos Ordóñez, <i>University of Houston, USA.</i></li><li>• <b>Consistent Metric Fluctuations in <math>AdS_6/CFT_5</math>.</b> June 2021–January 2022 Advisor: Prof. Carlos Nunez, <i>University of Swansea, UK.</i></li><li>• <b>Computation of the Hilbert Series for the Coulomb branch of <math>3d N = 4</math> <math>U(1)</math> gauge theory with <math>n</math> flavors and quiver <math>[1] - 1 - 1 - [1]</math> (framed <math>A_2</math>).</b> June–July 2021 Advisor: Prof. Amihay Hanany, <i>Imperial College London, UK.</i></li><li>• <b>Postgraduate Thesis: String Inflation and An Introduction to The String Swampland</b> 2018–2019 Advisor: Prof. Ruth Gregory, <i>Durham University and King’s College London, UK</i></li><li>• <b>Summer School: Long Term Data Sets for Understanding of Solar and Stellar Magnetic Cycles.</b> 2018 <i>International Astronomical Union Symposium, Jaipur, India.</i></li><li>• <b>Undergraduate Project:</b><ul style="list-style-type: none"><li>◦ <b>Curved Spacetime and Introduction to General Theory of Relativity.</b> 2017–2018 <i>Inter University Center for Astrophysics and Astronomy, Pune, India..</i></li><li>◦ <b>Search for Extraterrestrial Intelligence in Interstellar Space.</b> 2017 <i>Department of Astronomy and Astrophysics, Amity University Noida, India.</i></li></ul></li></ul>

	<ul style="list-style-type: none"> <li>○ <b>Multiverse, a consequence of Cosmic Inflation.</b> 2016 <i>Department of Astronomy and Astrophysics, Amity University Noida, India.</i></li> </ul>	
	<ul style="list-style-type: none"> <li>● <b>All India Asteroid Search Campaign.</b> 2016 Advisor: Dr. Patrick Miller, <i>Hardin-Simmons University, Texas, USA.</i></li> </ul>	
TEACHING EXPERIENCE	<ul style="list-style-type: none"> <li>● <b>Lead Teaching Assistant</b> 2022–Present</li> <li>● <b>Physics 2326:</b> University Physics II 2023</li> <li>● <b>Physics 1101:</b> Undergraduate Classical Mechanics 2022</li> </ul>	
TECHNICAL SKILLS	<ul style="list-style-type: none"> <li>● <i>Programming Languages:</i> C/C++, Html.</li> <li>● <i>Technical Softwares:</i> L<sup>A</sup>T<sub>E</sub>X, MATLAB, Mathematica, Queuing Systems Cluster Architecture, Final Cut Pro.</li> </ul>	
PUBLIC TALKS	<ul style="list-style-type: none"> <li>● <b>Open problems in Theoretical Physics</b> 2021 Amity University Noida, India.</li> <li>● <b>On the Foundations of Quantum Mechanics.</b> 2020 Christ University, Bangalore, India.</li> <li>● <b>Gravitational Waves and Blackholes.</b> 2018 Beyond portals Head Quarters, New Delhi, India.</li> </ul>	
ACHIEVEMENTS	<ul style="list-style-type: none"> <li>● Discovered two Provisional Asteroids in <i>International Asteroid Search Campaign.</i></li> <li>● Discovered 33 Preliminary Asteroids with <i>International Astronomical Search Collaboration</i> and <i>Pan-STARRS, Hawaii, USA.</i></li> <li>● Successfully passed various <i>National Science Olympiads.</i></li> <li>● Secured first position in the ‘Prove that it cannot be Proved’ competition at <i>Amity University Noida.</i></li> <li>● Secured first position in explaining <i>Hawking Radiation</i> at Science Club <i>Amity University Noida.</i></li> <li>● Successfully passed <i>National Problem solving Assessment.</i></li> </ul>	
EXTRA-CURRICULAR	<ul style="list-style-type: none"> <li>● Social Media content creator</li> <li>● YouTube Channel: Prachi Garella</li> <li>● Podcast: The Knowmads Podcast</li> </ul>	
COMMUNITY OUTREACH	<ul style="list-style-type: none"> <li>● Volunteered during <i>COVID-19 Pandemic</i> in the distribution of supplies to the underprivileged.</li> <li>● Volunteer at the <i>Sanjay Gandhi Animal Health Care Center.</i></li> <li>● Volunteer Educator at the Slums of New Delhi.</li> <li>● Volunteer at <i>Samarpan: Association for advancement of the deprived.</i></li> </ul>	
SCIENCE COMMUNICATION	<p>Co-founder of ‘<i>Beyond Portals</i>’, an organisation to popularise various developments in Science across various platforms. As a part of which weekly Theoretical Physics seminars are held at <i>Clubhouse</i> with physicists from all around the world.</p>	