

CONTACT INFORMATION	610-F Science and Research 1 Houston, TX, USA - 77204 Mob: +1-3465451497, +91-9871756332,	Website: bhavaytyagi.com Linkedin: www.linkedin.com/bhavaytyagi ✉ E-mail: (mail, physics or podcast) [at]bhavaytyagi[dot]com ✉ Work E-mail: bttyagi@uh.edu
EDUCATION	<p>University of Houston, College of Natural Sciences and Mathematics Aug 2022–Present</p> <ul style="list-style-type: none"> Research Assistant, PhD Candidate Advisor: Prof. Eric R. Bittner <p>Durham University, Ustinov College, Durham, UK Oct 2018– Sept 2019</p> <ul style="list-style-type: none"> M.Sc. in Particles, Strings and Cosmology, Result: Merit – 180 credits. Thesis: An Introduction to AdS/CFT and the Holographic Entanglement Entropy. <i>Durham University, UK</i> Supervisor: Prof. Simon F. Ross, Reader: Prof. Nabil Iqbal <p>Amity University Noida, India. Aug 2015–May 2018</p> <ul style="list-style-type: none"> B.Sc. (Honours) Physics, CGPA: 8.05/10 (First Division) – 176 credits. 	
RECENT PUBLICATIONS	<ol style="list-style-type: none"> E. R. Bittner and B. Tyagi. “Statistical Control of Relaxation and Synchronization in Open Anyonic Systems” arXiv 2025 E. R. Bittner and B. Tyagi. “Noise induced synchronisation in coupled quantum oscillators.” The Journal of Chemical Physics 2025 B. Tyagi, F. Suzuki, V. A. Chernyak, and N. A. Sinitsyn. “Asymmetry Amplification by a Nonadiabatic Passage through a Critical Point.” Physical Review A 2025 B. Tyagi, H. Li, E. R. Bittner, A. Piryatinski, and C. Silva-Acuna. “Noise-Induced Quantum Synchronization and Entanglement in a Quantum Analogue of Huygens’ Clock” The Journal of Physical Chemistry Letters 2024 <p>The full list can be found on my Google Scholar or arXiv.</p>	
CURRENT RESEARCH	<ul style="list-style-type: none"> Thesis: Noise-Induced Order in Quantum Matter January 2024–Present <i>University of Houston, Texas, USA</i> PhD Advisor: Prof. Eric R. Bittner Helical SYK Model in 1+1 Dimension June 2025–Present <i>University of Houston, Texas, USA</i> Supervisor (Thesis Committee Member): Prof. Pavan Hosur Dynamics of Phase Transitions and Integrability in Quantum Systems June 2024–Present <i>Los Alamos National Lab, New Mexico, USA</i> Supervisor (Thesis Committee Member): Dr. Nikolai A. Sinitsyn 	
ACHIEVEMENTS	<ul style="list-style-type: none"> European Cooperation in Science and Technology Fellowship 2025 APS Science Advocacy Champion Award 2025 Cullen Fellowship, University of Houston 2025 Best Talk, Physics Research Day 2025, University of Houston 2025 Graduate Research Fellow at <i>Los Alamos National Lab</i> 2024 Awarded Distinction for Masters Thesis 2020 Undergraduate Research Fellow <i>Harish Chandra Research Institute</i> 2017 	

LEADERSHIP & TEACHING EXPERIENCE	<ul style="list-style-type: none"> American Physical Society Advocacy Champion 	2025–Present
	<ul style="list-style-type: none"> Chair American Physical Society (APS) Chapter at University of Houston 	2024–2025
	<ul style="list-style-type: none"> Physics 2125 (University Level Classical Mechanics) 	2023–2024
	<ul style="list-style-type: none"> Physics 1101 (College Level Classical Mechanics) 	2022–2023
	<ul style="list-style-type: none"> Physics 2126 (Topics in Modern Physics: Wave Optics, Quantum Mechanics, Nuclear Physics) 	Summer 2023
TALKS/POSTERS	8. Title: On “Noise-Friendly” Quantum Systems Telluride Science and Research Center <i>Telluride, Colorado, USA</i>	September 2025
	7. Title: Asymmetry Amplification by a Non-Adiabatic Passage Through a Critical Point University of Warsaw <i>Warsaw, Poland</i>	September 2025
	6. Title: Noise-Induced Synchronisation and Entanglement APS Global Physics Summit <i>Anaheim, California, USA</i>	March 2025
	5. Title: Asymmetry Amplification by a Non-Adiabatic Passage through a Critical Point APS Global Physics Summit <i>Anaheim, California, USA</i>	March 2025
	4. Title: Asymmetry Amplification by a Non-Adiabatic Passage through a Critical Point CNLS Summer Student Talks <i>Center for Non-Linear Studies, Los Alamos National Lab, NM, USA</i>	Summer 2024
	3. Title: Black Hole Information Problem & Recent Developments Quantum Photonics Physics Forum <i>Online</i>	September 2021
	2. Title: On Quantum Entanglement and the Interpretation of Quantum Mechanics. Christ University Physics Club <i>Christ University Bangalore, India</i>	2020
	1. Title: On Relativity and Gravitation: Applications to Modern Physics. Beyond Portals Lecture Series <i>Beyond Portals HQ, New Delhi, India</i>	2018
EXTRA- CURRICULAR ACTIVITIES	<ul style="list-style-type: none"> The Knowmads Podcast 	
	<ul style="list-style-type: none"> Music Channel 	
	<ul style="list-style-type: none"> Co-founder of ‘Beyond Portals’. An Organization to Promote, Popularize and Support research in fundamental sciences. 	
	<ul style="list-style-type: none"> Science Advocacy and Policy Making 	