Himanshu Bora

Assistant Professor • Department of Physics Kamrup College, Chamata • Nalbari, Assam, India

ORCID · Vidwan · Google Scholar · ArXiv

Personal Information

Date of birth : December 21, 1996

Citizenship : Indian

Languages : English (Full Professional Proficiency) • Assamese (Native)

Education

2024 – present **Ph.D.**

Department of Physics

Bhattadev University - Bajali, Assam, India

Title: T.B.D.

Guide: Dr. Debajyoti Dutta

2015 – 2020 Integrated M.Sc. in Physics

Department of Physics

Dibrugarh University - Dibrugarh, Assam, India

Specialization: High Energy Physics

2012 – 2015 **HSSLC (12th Standard)** Stream: Science

Board: Assam Higher Secondary Education Council (AHSEC) School: Sarupathar H.S. School – Sarupathar, Assam, India

2012 **HSLC (10th Standard)**

Board: Board of Secondary Education, Assam (SEBA)

School: Dayanand Vidya Niketan - Sarupathar, Assam, India

Professional Expereince

Sep 2022 Assistant Professor

present Department of Physics

Kamrup College - Chamata, Assam, India

Nov 2021 **Lecturer** (contractual)

- Apr 2022 Department of Physics

Dibrugarh Hanumanbax Surajmall Kanoi College - Dibrugarh, Assam, India

Courses Taught (selected)

Mathematical Physics I, Mathematical Physics II, Mathematical Physics III, Classical Mechanics, Quantum Mechanics and Applications, Basic Programming in C, Computational Physics Skill

Research Interests

Neutrino Oscillations, Beyond Standard Model Physics

Dibrugarh University - Dibrugarh, Assam, India

Research Experience

Oct 2020

2021

– Jul 2021	Topic: Geometrothermodynamics of Some Black Hole Systems Guide: Dr. Prabwal Jyoti Phukon, Dibrugarh University, Dibrugarh, India
Jun 2017 – Aug 2017	Bharathiar University – Coimbatore, Tamil Nadu, India (under FAST-SF program) Title: A Transformation Method for Construction of Exactly Solvable Potentials Guide: Prof. S. Saravanan, Bharathiar University, Coimbatore, India
	Schools, Workshops and Conferences Attended
Dec 9 – Dec 13 2024	GIAN course on <i>Standard Model Effective Field Theories and Applications to Higgs, Neutrinos and Dark Matter</i> by Department of Physics and Centre of Educational Technology, Indian Institute of Technology Guwahati
Jan 6 – Jan 10 2024	Pedagogic Workshop on Astronomy, Astrophysics and Cosmology: A Faculty Enrichment Programme by Department of Physics, Gauhati University and Inter University Center for Astronomy and Astrophysics (IUCAA-TLC and IUCAA-ACE)
Dec 12 - Dec 22 2023	Radio Astronomy Winter School-2023 by Inter University Center for Astronomy and Astrophysics (IUCAA) and National Center for Radio Astrophysics (NCRA-TIFR) (participated as mentor to student participants)
Jan 6 – Mar 4 2023	Winter School on Deep Learning: From Perceptrons to Diffusion Models by Electronics and Communication Sciences Unit, Indian Statistical Institute Kolkata (online mode)
Jul 25 – Jul 29 2022	Online Workshop on Artificial Intelligence and High Performance Computing by National Institute of Technology Mizoram & Indian Institute of Technology Kharagpur
May 26 -May 30 2022	Workshop on Space and Atmospheric Sciences' Research Tools by Department of Physics, Dibrugarh University
Sep 20 – Sep 23	Online Workshop on High Performance Computing for Astrophysics and Astronomy by

Square Kilometer Array- India Consort. & Indian Institute of Technology Kharagpur

May 10 - Jun 11 2021	Introductory Summer School in Astronomy and Astrophysics by Inter University Center for Astronomy and Astrophysics (IUCAA) (online mode)
Aug 17 - Aug 31 2021	Workshop on Particle Physics, 2020 by Department of Physics, Assam Don Bosco University (online mode)
Jan 7 – Jan 11 2019	Workshop on Celestial Mechanics and Dynamical Astronomy by Department of Mathematics, Central University of Rajasthan
Oct 7 – Oct 13 2018	Workshop on Gravitation and Gravitational Waves by Department of Physics, Assam University, Silchar
Feb 22 – Mar 3 2017	ARIES Training School in Observational Astronomy-2017 by Aryabhatta Research Institute of Observational Sciences, Nainital
Jun 21 – Jul 12 2016	CCSU Astronomy and Astrophysics Summer School-2016 by Department of Physics, Cotton College State University
Nov 2 – Nov 5 2015	National Conference on Current Issues in Cosmology, Astrophysics and High Energy Physics by Dibrugarh University
	Honors, Awards and Scholarships
Jun 2021	Awarded INSPIRE Fellowship 2020 provisionally for doctoral research by Department of Science and Technology, Government of India (<i>provisional award not availed</i>)
May 2021	Awarded Junior Research Fellowship by Council of Scientific and Industrial Research, India through Joint CSIR-UGC NET Examination , June 2020 (held in November 2020)
May 2021	Obtained eligibility for Lectureship / Assistant Professor in Physical Sciences through Joint CSIR-UGC NET Examination , June 2020 (held in November 2020), All India Rank-149 (99.51 percentile)
Feb 2020	Qualified Graduate Aptitude Test in Engineering-2020 (GATE-2020) in Physics organised jointly by IISc/IITs (held in February 2020)
2017	Awarded Focus Area Science Technology Summer Fellowship (FAST-SF) jointly by Indian Academy of Sciences, Bengaluru; Indian National Science Academy, New Delhi and The National Academy of Sciences, Prayagraj
2015-2020 (duration)	Awarded INSPIRE-SHE Scholarship by Department of Science and Technology, Government of India (awarded to top 1% students in India in 10+2, pursuing basic sciences)

Awarded **Anundoram Borooah Award-2012** with distinction by Government of Assam (awarded to First Division holders in HSLC Examination, 2012 conducted by SEBA, Assam)

Professional Memberships

Jan 2025 - Physics Academy of North East (lifetime membership)

Feb 2023 – Assam Physical Society (lifetime membership)

Technical Skills

Languages

Proficient in C, Python Familiar with C++, Fortran

Others

Operating System: Linux

Document Processing: L'TEX, LibreOffice

Web Development: HTML, CSS Others: Wolfram Mathematica

Additional Qualifications

2014 B.A. in Fine Arts from Sarbabharatiya Sangeet-O-Sanskriti Parishad, Kolkata

Outreach Activities, Interests and Public Engagement

Outreach:

Convenor of "ituxitu", an online talk series that connects UG/PG students of Assam to researchers in Physics and Astronomy

Quizzing:

Founder and Joint Co-ordinator of Dibrugarh University Debate and Quiz Forum, Represented Dibrugarh University in 50+ quiz competitions at inter-university and state level

References

Dr. Debajyoti Dutta
Assistant Professor
Department of Physics, Bhattadev University

phy.debajyoti@bhattadevuniversity.ac.in

Dr. Prabwal Jyoti Phukon
Associate Professor
Department of Physics, Dibrugarh University

✓ prabwal@dibru.ac.in

Declaration

I hereby declare that all the information stated here are correct and complete to the best of my knowledge and belief.

Date: 6 February, 2025

Place: Nalbari, Assam, India Himanshu Bora