

Dr. Priyanka Chowdhury

Assistant Professor

Education

- 2010–2017 **Doctor of Philosophy, Ph.D. :**
Title : Study On Quantum Properties Of Non-Gaussian States.
Supervisor : Prof. Archan S. Majumdar.
Joint Supervisor : Prof. Dipankar Home
University : University of Calcutta.
Year of Award : 2017
- 2007–2009 **Master of Science, M.Sc.**
Subject : Physics.
University : University of Calcutta.
- 2004–2007 **Bachelor of Science, B.Sc.**
Subject : Physics (Hons.).
University : University of Calcutta.

Work Experience

- 2021– **Assistant Professor**
Present Basirhat College,
Basirhat, North 24 Parganas, West Bengal, PIN- 743412, India.
- 2017–2021 **Assistant Professor**
Mahishadal Raj College,
Garh Kamalpur, Mahishadal, Purba Medinipur, West Bengal, PIN - 721628, India.

Teaching Experience

Classical Mechanics, Dynamical Systems, Electromagnetism, Fortran, Mathematical methods of Physics, Python, Quantum Field Theory, Statistical Mechanics, Vector.

Research Experience

- 2012–2016 **Senior Research Scholar**, *S. N. Bose National Centre for Basic Sciences, Kolkata*
2010–2012 **Junior Research Scholar**, *S. N. Bose National Centre for Basic Sciences, Kolkata*

Awards and Scholarships

- 2010 **National Eligibility Test**
Junior Research Fellowship, JRF.

Computer Skills

Mathematica, Python, Fortran, Latex

Publications

- P. Chowdhury, T. Pramanik, and A. S. Majumdar, "Stronger steerability criterion for more uncertain continuous-variable systems", [Physical Review A **92**, 042317 \(2015\)](#).
- P. Chowdhury, T. Pramanik, A. S. Majumdar, and G. S. Agarwal, "Einstein- Podolsky- Rosen steering using quantum correlations in non-Gaussian entangled states", [Physical Review A **89**, 012104 \(2014\)](#).
- T. Pramanik, P. Chowdhury, and A. S. Majumdar, "Fine-grained lower limit of quantum uncertainty in the presence of quantum memory", [Physical Review Letters **110**, 020402 \(2013\)](#).
- P. Chowdhury, A. S. Majumdar, and G. S. Agarwal, "Nonlocal continuous-variable correlations and violation of Bells inequality for light beams with topological singularities", [Physical Review A **88**, 013830 \(2013\)](#).
- P. Chowdhury, D. Home, A. S. Majumdar, S. V. Mousavi, M. R. Mozaffari and S. Sinha, "Strong quantum violation of the gravitational weak equivalence principle by a non-Gaussian wave packet", [Classical and Quantum Gravity **29** 025010 \(2012\)](#).

Conferences/Workshops Participation

2010-2023

- Quantum Frontiers and Fundamentals: Experimental Studies and Theoretical Ramifications, Raman Research Institute, Bangalore, India, during 30 April-04 May, 2018.
- Meeting on Quantum Information Processing and Applications (QIPA-2013), Harish-Chandra Research Institute (HRI), Allahabad, India, during 2-8 December, 2013.
- Workshop on Information and Security in Quantum World held at Indian Statistical Institute, Kolkata, India, during 28th-30th March, 2012.
- School on Quantum Information-2011 held at Institute of Physics, Bhubaneswar, India, during 13th-22th December, 2011.
- 75 Years of Quantum Entanglement & Information Theoretic Application held at S. N. Bose National Centre for Basic Sciences, Kolkata, India, during 6th-12th January, 2011.