



Dr. Subha Samanta

Assistant Professor
Department of Physics,
Sri Ramkrishna Sarada Vidya Mahapitha,
Kamarpukur, Hooghly, West Bengal, 712612.
E-mail: subhasamanta92@gmail.com

Current Position

Assistant Professor in Physics at Sri Ramkrishna Sarada Vidya Mahapitha (affiliated to The University of Burdwan), Hooghly, West Bengal (November, 2023 to till date).

Previous Position

State Aided College Teacher in Physics at Scottish Church College (affiliated to The University of Calcutta), Kolkata, West Bengal (January, 2020 to October, 2023).

Academic information

Doctorate: Ph.D (2019) in Physics, Plasma Physics Division, Saha Institute of Nuclear Physics (Homi Bhabha National Institute), Kolkata.

Post Graduate: M. Sc. (2014) in Physics, Department of Physics, Jadavpur University, Kolkata.

Undergraduate: B. Sc. Hons. (2012) in Physics, Department of Physics, Jadavpur University, Kolkata.

Publications

1) 'Energization of charged particles in regular and chaotic magnetic fields',

Subha Samanta, P.K. Shaw, M.S. Janaki, B. Dasgupta, Physics of Plasmas **24**, 054506 (2017).

2) 'A localized cathode glow in the presence of a bar magnet and its associated nonlinear dynamics',

P.K. Shaw, **Subha Samanta**, D. Saha, S. Ghosh, M.S. Janaki, A.N.S. Iyengar, Physics of Plasmas **24**, 082105 (2017).

3) 'Characterization of magnetic field lines in connection with their transport in Beltrami magnetic fields',

Subha Samanta, M.S. Janaki, A.K. Ram, B. Dasgupta, Physics of Plasmas **25**, 122308 (2018).

4) 'Stickiness in double-curl Beltrami magnetic fields',

Subha Samanta, M.S. Janaki, Chaos **28**, 123115 (2018).

5) 'Order to chaos transitions in damped KdV equation modeled as a jerk equation',

Subha Samanta, P.K. Shaw, M.S. Janaki, A.N.S. Iyengar, Physica Scripta **94**, 045602 (2019).

6) 'Perpendicular diffusion of magnetic field lines in double curl Beltrami magnetic fields',

Subha Samanta, M.S. Janaki, Physica A **529**, 121540 (2019).

7) 'Comparative study of charged particle dynamics in time-stationary and time-varying spatially chaotic magnetic fields with sinusoidal spatiotemporal dependence',

Subha Samanta, Chaos 31, 083113 (2021).

8) 'Effect of shear flow on Jeans instability of self-gravitating dusty plasmas',

Subha Samanta, The European Physical Journal Plus 139, 1130 (2024).

9) 'Derivation of Planck's Law of Radiation by Satyendranath Bose',

Subha Samanta, Resonance 30, 191 (2025).

Popular Articles

1)সঙ্গীত স্বরগ্রামের বিজ্ঞান: পাশ্চাত্য সঙ্গীত, শুভা সামন্ত
<https://bigyan.org.in/2022/09/science-of-music-western-01/>

2)সঙ্গীত স্বরগ্রামের বিজ্ঞান: ভারতীয় সঙ্গীত, শুভা সামন্ত
<https://bigyan.org.in/2022/09/science-of-music-western-01/>

Awards

1) Indu Bhusan Putatunda and Shanti Sudha Putatunda Memorial Gold Plated Silver Medal, from Alumni Association, NCE Bengal and Jadavpur University, for securing the highest marks in Department of Physics in the Inter BSc University Examination, 2011.

2) Prof. Satyendra Nath Bose Memorial Bronze Medal, from Jadavpur University, for securing the highest marks in theoretical papers in Physics at the MSc Examination, 2014.

3) Winner in Poster Presentation at National Conference on Plasma Physics and Nonlinear Dynamics, 2017, held at JIS University, Agarpara, Kolkata.

4) Award for 1st position among the contributory papers in Prof. M.R. Gupta Memorial 2nd National Seminar, 2018, held at Jadavpur University, Kolkata.

5) Outstanding paper award, from Bidhannagar College and Department of Science and Technology and Biotechnology, Govt. of West Bengal, in the 3rd Regional Science and Technology Congress, Southern Region, 2018, held at Bidhannagar College, Kolkata.

6) Outstanding paper award, from Maulana Abul Kalam Azad University of Technology and Department of Science and Technology and Biotechnology, Govt. of West Bengal, in the 4th Regional Science and Technology Congress, Southern Region, 2019, held at Maulana Abul Kalam Azad University of Technology, Haringhata, Nadia, West Bengal.

7) First position in the best paper award contest in Prof. M.R. Gupta Memorial Seminar on Nonlinear and Complex Phenomena, jointly organized by Advanced Centre for Nonlinear and Complex Phenomena (ACNCP) and Calcutta Mathematical Society (CMS), Kolkata in collaboration with Centre for Plasma Studies (CPS), Jadavpur University (JU), Kolkata held at The Calcutta Mathematical Society, Kolkata on 7th September, 2024.

Academic Membership

Plasma Science Society of India (Life member).