

## Personal profile

1. **Name:** Dr ARNAB BARMAN
2. **Date of Birth:** 05/09/1988
3. **Gender:** Male
4. **Nationality:** Indian
5. **Current Designation:** Assistant Professor
6. **Date of Joining:** 01/04/2017



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E-mail: [arnabbarman.math@gmail.com](mailto:arnabbarman.math@gmail.com)
8. **Academic Qualification:** (a) B.Sc. from University of North Bengal, 2009  
(b) M.Sc. from Visva-Bharati University, 2011  
(c) Ph.D. from Visva-Bharati University, 2020

### 9. Details of research experience (Doctoral Study):

- (a) Organization: Visva-Bharati University
- (b) Period: 2013-2020
- (c) Place: Department of Mathematics  
Siksha Bhavana, Visva-Bharati  
Santiniketan - 731 235  
West Bengal, India
- (d) Area of research: Theoretical Plasma Physics
- (e) Title of research: Nonlinear waves and Landau damping in multi-component plasmas

## 10. Conferences (International and National) attended:

- i) National Workshop on “NONLINEAR WAVES: THEORY AND SIMULATION” (14-18 January, 2013) organized by Dept. of Mathematics, NIT Durgapur, W. B., India.
- ii) National Workshop on “MATHEMATICS TEACHING UNDER SEMESTER SYSTEM AT UNDERGRADUATE LEVEL: PERSPECTIVES AND STRATEGIES” (1-2 March, 2014) organized by Centre for Mathematics Education (Institute of Science), Siksha Bhavana, Visva-Bharati, Shantiniketan-731 235, W. B., India.
- iii) National Seminar on “RECENT PERSPECTIVES ON NONLINEAR MATHEMATICS AND ITS APPLICATION” (25-56 March, 2014) organized by Dept. of Mathematics, Siksha Bhavana, Visva-Bharati, Shantiniketan-731 235, W. B., India.
- iv) “NATIONAL SEMINAR ON NONLINEAR & COMPLEX PHENOMENA ON PLASMAS AND FLUIDS” (21 January, 2016) organized by Centre for Plasma Studies, Jadavpur University in collaboration with Department of Instrumentation Science, JU and Advanced Center for Nonlinear and Complex Phenomena (Kolkata).
- v) International conference on “COMPLEX DYNAMICAL SYSTEMS AND APPLICATIONS, 2016 (CDSA 2016)” (15-17 February, 2016) organized by the Department of Mathematics, National Institute of Technology Durgapur, India (NIT Durgapur).
- vi) National Conference on “COMPUTATIONAL MATHEMATICS & NONLINEAR DYNAMICS” (CMND–2016; 19-21Feb. 2016) organized by the Department of Mathematics, Visva Bharati, Santiniketan731 235.
- vii) International conference on “MATHEMATICS AND APPLICATIONS-2024” (March 05-06, 2024) organized by Department of Mathematics, The University of Burdwan, Burdwan – 713104, West Bengal, India.

## 11. Publications:

- 1) **“Oblique propagation of dust ion-acoustic solitary waves in a magnetized dusty pair-ion plasma”**, A. P. Misra and **Arnab Barman**, Phys. Plasmas **21**, 073702 (2014).
- 2) **“Landau damping effects on dust-acoustic solitary waves in a dusty negative-ion plasma”**, **Arnab Barman** and A. P. Misra, Phys. Plasmas **21**, 073708 (2014).
- 3) **“Landau damping of Gardner solitons in a dusty bi-ion plasma”**, A. P. Misra and **Arnab Barman**, Phys. Plasmas **22**, 073708 (2015).
- 4) **“Effects of Landau damping on ion-acoustic solitary waves in a semiclassical plasma”**, **Arnab Barman** and A. P. Misra, Phys. Plasmas **24**, 052116 (2017).
- 5) **“Landau damping effects on dust ion-acoustic solitary waves in a nonthermal pair-ion plasma”**, **Arnab Barman**, Waves Random Complex Med. 1-25 (2024).

12. **Status of publications:** All the above-mentioned papers are published in international journals.