Akash Biswas

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Katwa College
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EDUCATION

2017-20XX	Ph.D. in Applied Mathematics, Department of Applied Mathematics, University of Calcutta Dissertation: *Integrability of some non-linear systems in plasma models.* Advisor: Prof. Samiran Ghosh
2015-2017	M.Sc. in Applied Mathematics, University of Calcutta. Specialization in Dynamical Systems
2012-2015	B.Sc. (Hons.) in Mathematics, University of Calcutta.

FELLOWSHIPS AND SCHOLARSHIPS

2012-2017	INSPIRE Scholarship, Department of Science and Technology, Govt. of India.
2017-2019	Junior Research Fellowship, University Grant Commission, Govt. of India.
2019-2020	Senior Research Fellowship, University Grant Commission, Govt. of India.

PUBLICATIONS

Peer-Reviewed Articles:

1. *Nonlinear structure formation of electron acoustic waves in plasmas* by **A. Biswas**, S. Ghosh and N. Chakrabarti, *Physica Scripta*, **95**, 105603 (2020).
2. *Three-dimensional wave group dynamics of ion acoustic waves in electron–positron–ion plasmas in the presence of an external uniform magnetic field* by **A. Biswas**, D. Chakraborty, S. Pramanik and S. Ghosh, *Physics of Plasmas*, **28**, 062105 (2021).
3. *Nonlinear electrostatic ion cyclotron wave collapse and formation of wave packets in the presence of trapped electrons*, by **A. Biswas**, D. Chakraborty and S. Ghosh, *Physical Review E*, **106**, 055206 (2022).
4. *Excitation of ion acoustic collisionless shock by moving obstacle* by D. Chakraborty, **A. Biswas** and S. Ghosh, Physics of Plasmas, **29**, 122304 (2022).
5. *Three-dimensional nonlinear ion acoustic waves near critical density in magnetized negative ion plasmas* by **A. Biswas**, D. Chakraborty and S. Ghosh, published online in *Waves in Random and Complex Media*, 2024.
6. *Weakly nonlinear dynamics of magnetosonic wave at a critical angle excited by a moving charged object in collisional plasmas* by A. Mistri, **A. Biswas** and S. Ghosh, *Proceedings of the Royal Society A*, **480**, 20240202 (2024).

Book Chapters: (Nil)

TEACHING EXPERIENCE

2020-Now Assistant Professor in Mathematics, Katwa College.

RESEARCH INTERESTS

Nonlinear Waves
Integrable Systems
Applied PDEs

TEACHING INTERESTS

Differential Equations
Real Analysis
Numerical Analysis

CONFERENCE PARTICIPATION

1. "Nonlinear structure formation of electron acoustic waves in plasmas" in RAAMTC2021 organized by Department of Applied Mathematics, University of Calcutta.
2. "Wave group dynamics of ion acoustic wave in magnetized electron positron ion plasma: Through analytical exposure" in AMSE-2022 organized by Centre for Data Science, Siksha 'O' Anusandhan (Deemed to be University).

FACULTY ENRICHMENT PROGRAMMES

- Faculty Induction Programme in Pondicherry University
- Refresher Course in Guru Ghasidas Viswavidyalaya.
- Implementation of Numerical Methods using MATLAB, organized by Department of Mathematics, IIT Indore, 3^{rd} – 8^{th} January, 2022.

LANGUAGES

Bengali (Mother tongue)
English (Second language)
Hindi (Third Language)

TECHNICAL SKILLS

Programming Language: C.
Computer Algebra System: MATLAB.
Typeset: LATEX