

**Faculty Profile**  
**2018-2023**

**1. Personal Details:**

**Name: Parna Roy**

**Qualification: M.Sc, PhD**

**Designation: Assistant Professor**

**Department: Physics**

**Email id: parna.roy14@gmail.com**

**Teaching Experience [substantive post only]: 3 years**

**2. Previous work places: NA**

**3. Academic Credentials:**

**4. Courses Taught: Mathematical Physics, Electrodynamics, Thermodynamics, Quantum Mechanics, Statistical Mechanics, Classical Mechanics, Experimental Technique, Applied Optics**

**5. Administrative Experience (if any):**

**6. Specialization and Research Interests: Nonequilibrium Statistical Mechanics, Phase transitions and Critical phenomena in spin systems, networks, dynamical phenomena in complex physical and social systems etc.**

**7. Publications: (Research article, General article, Books, Books chapter etc.)**

1. Exit probability in inflow dynamics: Nonuniversality induced by range, asymmetry, and fluctuation, P. Roy, S. Biswas and P. Sen, Phys. Rev. E 89, 030103 (R) (2014).

2. Universal features of exit probability in opinion dynamics models with domain size dependent dynamics, P. Roy, S. Biswas and P. Sen, J. Phys. A: Math. Theor. 47 (2014) 495001 .

3. Generalised Ising Glauber model: Exit probability using Kirkwood approximation, P. Roy and P. Sen, J. Stat. Phys., 159 (2015), 893–904.

4. Continuous utility factor in segregation models, P. Roy and P. Sen, Phys. Rev. E 93, 022310 (2016).

5. Interplay of noise and curvature driven dynamics in two dimensions, P. Roy and P. Sen, Phys. Rev. E 95, 020101 (R) (2017).

6. Pinned or moving: states of a single shock in a ring , Parna Roy, Anjan Kumar Chandra, Abhik Basu, Phys. Rev. E 102, 012105 (2020) .

7. Asymmetric exclusion processes with fixed resources: Reservoir crowding and steady states , Astik Haldar, Parna Roy, Abhik Basu , Phys. Rev. E 104, 034106 (2021)

8. Patents (if any): NA

9. Research Project (if any): NA

10. Research Supervision (Ph.D./M.Phil.) NA

11. Seminar/Workshop participated: (2018-2023)

**CMMSSP 2023**, A TWO DAY NATIONAL LEVEL SYMPOSIUM ON CONDENSED MATTER, MATERIALS SCIENCE & STATISTICAL PHYSICS organised by Department of Physics, Presidency University, Kolkata

**Young Physicist Meet 2023**, organised by Adamas University

**Recent Topics in Statistical Mechanics 2019**, organised by NISER, BHUBANESWAR

12. Programmes Conducted / Organised as Convenor / Organising Secretary etc.: NA

13. Achievements/Awards/Membership:

14. Any Other Relevant Information: