

Faculty Profile



Name: Dr. Pijush Panday

Designation: Assistant Professor

Teaching Areas: Linear Algebra, Differential Equations, Discrete Mathematics, Calculus, Real Analysis

Research Interests: Mathematical Ecology, Disease Modelling, Nonlinear dynamics

Education/ Experience:

- **Postdoctoral Fellow**, University of Alberta, Edmonton, Canada, April 2022- February 2023.
- **Postdoctoral Fellow**, Indian Institute of Technology, Madras, Chennai, December 2021- March 2022.
- **Visiting Scientist**, Indian Statistical Institute, Kolkata, August 2021- October 2022.
- **Ph.D. Applied Mathematics**, University of Calcutta (Research work done at Indian Statistical Institute, Kolkata), West Bengal, 2021
- **M.Sc. Mathematics**, Jadavpur University, West Bengal, 2013
- **B.Sc. (Mathematics Honours)**, Jadavpur University, West Bengal, 2011

Research / Selected Publications:

1. **Pijush Panday**, Nikhil Pal, Sudip Samanta, and Joydev Chattopadhyay. Stability and bifurcation analysis of a three-species food chain model with fear. *International Journal of Bifurcation and Chaos*; 28(01):1850009, 2018
2. **Pijush Panday**, Nikhil Pal, Sudip Samanta, Joydev Chattopadhyay. A three species food chain model with fear induced trophic cascade. *International Journal of Applied and Computational Mathematics*; 5(4):100, 2019.
3. **Pijush Panday**, Sudip Samanta, Nikhil Pal, Joydev Chattopadhyay. Delay induced multiple stability switches and chaos in a predator-prey model with fear effect. *Mathematics and Computer in Simulation*; 172:134-158, 2020.
4. **Pijush Panday**, Nikhil Pal, Sudip Samanta, Piotr Tryjanowski, Joydev Chattopadhyay. Dynamics of a stage-structured predator-prey model incorporating cost and benefit of fear-induced group defense. *Journal of Theoretical Biology*. 528, 110846, 2021.