

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE

2 A & B, Raja S. C. Mullick Road, Jadavpur, Kolkata-32



OPEN THESIS COLLOQUIUM

Title : "Dynamics of periodically driven spin systems"
Speaker : Tista Banerjee, School of Physical Sciences, IACS
Date : 19th March, 2025
Time : 16:30 HRS (IST)
Venue : Physics Seminar Room (C-406), 3rd Floor, Centenary Building, IACS

Abstract : In this talk, I will first give a brief introduction of how the evolution of quantum systems changes under continuous monitoring by considering first, a simple two-level system and then, the extension to many-body systems. Next, I will try to convey how the interplay between emergent approximate conservation law and dissipation in the no-click limit of projective measurements, shapes the entanglement scaling properties of the steady state of a periodically driven quantum system. I will then briefly touch upon the fate of emergent conservation beyond no-click limit. Next, I will discuss the role of these conservation laws in the possibility of observing the Mpemba effect in a class of periodically driven many-body interacting quantum systems.

All are cordially invited to attend.