



**School of Mathematics**  
**Tata Institute of Fundamental Research**

05 July, 2024

**VV 2024 Colloquium**

Speaker : *Riddhi Shah*  
Affiliation : *Jawaharlal Nehru University*  
Title : *Introduction to Certain Aspects of Dynamics*  
Date & Time : *Tuesday, 9 July, 2024 at 2:30 pm*  
Venue : **Lecture Theatre (AG-66)**

**Abstract**

We will start with an introduction to some aspects of dynamical systems followed by an overview of the dynamics of distal maps, which were introduced by David Hilbert to study non-ergodic maps. We will discuss distal automorphisms on locally compact groups and observe some properties. We will also characterise these automorphisms in terms of its contraction groups and behaviour of their orbits. Then we will briefly discuss the dynamics of billiards, a related illumination problem and related work of an inspiring woman mathematician.

  
Milind Pilankar