



May 12 Initiative 2023

CELEBRATING WOMEN IN MATHEMATICS

at

Department of Mathematics
University of Delhi

Ist June, 2023

**2:30 pm: "*Distal Dynamics, Billiards and Illumination*"
lecture by Prof. Riddhi Shah, JNU**

Abstract: We will introduce dynamical systems with a few examples and provide an overview of distal maps, which were introduced by David Hilbert. We will discuss the relation between distality and the behaviour of the orbits, and present a characterisation of distal automorphisms in terms of their contraction groups. The second part of the talk will be on the dynamics of billiards, an illumination problem and related work of Maryam Mirzakhani on translation surfaces.

3:30 pm: "*Secrets of the Surface*"

This documentary explores the groundbreaking work of Maryam Mirzakhani, whose explorations into some of the furthest reaches of geometry earned her the distinction of being the first woman mathematician to win the Fields Medal, the highest honor in the field of mathematics.

4:30 pm: Tea

**Venue: Room R5, Satyakam Bhavan, Department of
Mathematics, University of Delhi**