



TATA INSTITUTE OF FUNDAMENTAL RESEARCH

ICTS Special Colloquium

Title : Some Inverse Problems in Active Matter

Speaker: L Mahadevan (Harvard University, USA)

Date : Thursday, 13th June 2024

Time : 2: 30 PM (IST)

Abstract: How can one grow a face or a flower from a flat sheet? How can one transport a

drop of active matter, optimally? How can a sentient object navigate in a noisy environment? How can one collectively herd a flock of sheep? And how can one engineer cooperative behavior in a swarm? I will discuss answers to some of these questions (using a vote to determine which ones!) using a combination of experimental and theoretical approaches, and time permitting, close with a

discussion of generative-AI-based approaches to these questions.

Venue : Madhava Lecture Hall

Zoom Link: https://icts-res-in.zoom.us/j/93777165337?pwd=kw3NcoFdETyuTYKMRgN2CaoPxiJU9o.1

Meeting ID: 937 7716 5337

Passcode: 202030