



INDIAN STATISTICAL INSTITUTE

Theoretical Statistics and Mathematics Unit, Kolkata

SEMINAR

Date: August 19, 2024

Time: 04:00 PM

VENUE:

L- infinity

(5th Floor, A.N. Kolmogorov Bhavan), ISI Kolkata

TITLE:

Memory in Motion: Random Walks with Memory

SPEAKER:

Tamojit Sadhukhan

Stat-Math Unit, ISI Kolkata

ABSTRACT:

Elephant random walk was introduced by Schutz and Trimper (2004) to study the effect of memory on random walks. It is a special type of random walk that, unlike the simple random walk with steps independent of each other, incorporates the memory of the past steps to determine its future steps. It has drawn attention of the Statistical Physics literature as it exhibits anomalous diffusion. This talk will concentrate on some generalizations and variations of the elephant random walk. We shall introduce some existing and new models of random walks with memory and investigate their asymptotic properties. (Based on ongoing works with Krishanu Maulik and Parthanil Roy.)

ALL ARE CORDIALLY INVITED