



INDIAN STATISTICAL INSTITUTE

Theoretical Statistics and Mathematics Unit, Kolkata

SEMINAR

Date: August 19, 2024

Time: 02:30 PM

VENUE:

L- infinity

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

TITLE:

Elephant Random Walks With Regularly Varying Memory

SPEAKER:

Aritra Majumdar

Stat-Math Unit, ISI Kolkata

ABSTRACT:

The Elephant Random Walk was introduced by Schutz and Trimper to study the effects of memory on random walks. The successive incremental steps of the walker depend on the direction of a past step, chosen uniformly at random. We study a generalization of the model, where at every epoch, a past step is chosen with probability proportional to a regularly varying sequence. The general model was introduced by Bertenghi and Laulin (2024). In this talk, we discuss the asymptotic behaviour of the walk on the integer line, along with a survey of existing results. We also mention some future directions towards the end. The talk is based on an ongoing work with Krishanu Maulik.

ALL ARE CORDIALLY INVITED