



INDIAN STATISTICAL INSTITUTE
Theoretical Statistics and Mathematics Unit, Kolkata

LECTURE

Date: July 17, 2023, Monday
Time: 04:15 PM

VENUE:

L-infinity

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

TITLE:

Recurrence and Transience of Rademacher Series

SPEAKER:

Satyaki Bhattacharya

Lund University

ABSTRACT:

We introduce the notion of a-walk $S(n) = a_1X_1 + \dots + a_nX_n$, based on a sequence of positive numbers $a = (a_1, a_2, \dots)$ and a Rademacher sequence X_1, X_2, \dots . We study recurrence/transience (properly defined) of such walks for various sequences of a . In particular, we establish the classification in the cases where $a_k = bk^\beta c$, $\beta > 0$, as well as in the case $a_k = d \log_\gamma k$ or $a_k = \log_\gamma k$ for $\gamma > 1$.

ALL ARE CORDIALLY INVITED