

## ICTS Probability Seminar

**Title** : Corner growth on  $N^d$  and other partially ordered sets

**Speaker** : Sunder Sethuraman (University of Arizona, USA)

**Date** : Friday, 20 February 2026

**Time** : 11:30 AM (IST)

**Abstract** : We consider a Markovian growth process on locally finite partially ordered sets  $\Lambda$ , equivalent to last passage percolation (LPP) with independent (not necessarily identical) exponentially distributed weights on the elements of  $\Lambda$ . Such a process includes inhomogeneous exponential LPP on the Euclidean lattice  $N^d$ .

In this talk, we discuss non-asymptotic bounds on the mean and variance of the passage time  $\tau_A$  to grow any set  $A \subset \Lambda$  in terms of characteristics of  $A$ . We also discuss a limit shape theorem when  $\Lambda$  is equipped with a 'monoid' structure. Methods involve making use of the backward equation associated to the Markovian evolution and comparison inequalities with respect to the time-reversed generator. Based on work with Tanner Resse <https://arxiv.org/abs/2602.02856>

**Venue** : Madhava Lecture Hall

Zoom Link: <https://us02web.zoom.us/j/88670406480>

Meeting ID: 886 7040 6480