universität innsbruck

Department of Mathematics

Inn'formal Probability Seminar

Elisabetta Candellero (Universita' degli Studi Roma Tre)

“Competition processes on hyperbolic non-amenable graphs”

Abstract

We consider two first-passage percolation processes, FPP_1 and FPP_\lambda, spreading with rates 1 and \lambda respectively, on a graph G with bounded degree. FPP_1 starts from a single source, while the initial configuration of FPP_\lambda consists of countably many seeds distributed according to a product of iid Bernoulli random variables of parameter \mu on the set of vertices.

This model is known as "First passage percolation in a hostile environment" (FPPHE), it was introduced by Stauffer and Sidoravicius as an auxiliary model for investigating a notoriously challenging model called Multiparticle Diffusion Limited Aggregation. We consider several questions about FPPHE, focusing on the case where G is a non-amenable hyperbolic graph. This talk is based on joint works with Alexandre Stauffer.

Tuesday | 14.03.2023 | 14:15

SR 734| civil engineer building