

随机数学研究中心学术报告

题目: Capacity of the range of critical branching random walks

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时间: 2021年4月19日, 3:30-4:30

地点: Zoom 63114900344 (<https://zoom.com.cn/j/63114900344> pw: 123456)

摘要: The capacity of a finite set is a fundamental concept in potential theory, characterized by the probability that the set is visited by an independent simple random walk started from afar. This concept has been brought up in recent years, motivated by researches in random interacements.

A critical branching random walk (BRW) is a random walk indexed by a Galton-Watson tree whose particles are expected to give 1 offspring in average. In this talk, we consider the range of a critical BRW in \mathbb{Z}^d conditioned to be large. We study the asymptotic of its capacity in dimensions $d \geq 3$ by constructing a translational-invariant model based on the original BRW.

This talk is based on the joint work with Yueyun Hu and Yijun Wan.