北京师范大学 随机数学研究中心

学术报告

题 目： On the convergence of local times for critical branching random walks

报告人： 白天衣 (上海纽约大学)

时 间： 2022年9月13日, 3:30-5:10

地 点： J8-110, 腾讯会议 881-413-689.

摘 要： Consider the critical branching random walk on the d-dimensional lattice. we are interested in counting the number of particles first arriving at a given sphere. We show that regardless of dimension, this quantity always converges to the exit local time of the integrated super-Brownian excursion. We also present our current attempt with the same local time method to the total number of particles on the sphere, generalizing a proposition of [Le Gall and Lin 2015] to high dimensions, and proposing a conjecture on the convergence to the subordination of the continuum random tree.