北京师范大学 随机数学研究中心

学术报告

报告人: 王喆 (瑞士洛桑联邦理工大学)

题目: the Poisson Hail Model, Stability, and Power Law Conditions

时间: 2022 年 6 月 24 日 (周五) 下午 4:00-5:00

地点: Zoom 会议号 824 3533 3668 密码 123456

摘要: The Poisson hail model is a stochastic system of interacting queues in \mathbb{Z}^d . Points in \mathbb{Z}^d represent servers, which receive jobs according to i.i.d. marked Poisson processes. Each job has random spatial and temporal sizes (R, τ) . Denote W(x, t) the workload of the system at a space-time point (x, t). The "stability" corresponds to the tightness of the family $(W(\mathbf{0}, t))_{t\geq 0}$. In this talk, we will discuss power law conditions on the sizes (R, τ) that guarantee "stability." In particular, we will deal with the case of infinite speed of propagation. This is joint work with Thomas Mountford.