中国科学院数学与系统科学研究院

应用数学研究所

华罗庚应用数学青年论坛

报告题目： Yaglom-type limits for branching Brownian motion with absorption in the slightly subcritical regime

报 告 人： 刘嘉琪 博士

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时　　间： **2023 年 7 月 12 日 (星期三) 上午 10:30--11:30**

地　　点： **Zoom 会议 952 0017 7878**

摘　　要： Branching Brownian motion is a random particle system that incorporates both the tree-like structure and the diffusion process. In this talk, we consider a slightly subcritical branching Brownian motion with absorption, where particles move as Brownian motion with drift, undergo dyadic fission at a constant rate, and are killed upon hitting the origin. We are interested in the asymptotic behaviors of the process conditioned on survival up to a large time t as the process approaches criticality. Results like this are called Yaglom type results. Specifically, we will discuss the existence of the Yaglom limit law, Yaglom-type limits for the number of particles and the maximal displacement. This is based on joint work with Julien Berestycki, Bastien Mallein and Jason Schweinsberg.

个人简介： Jiaqi Liu is a Postdoctoral Fellow in Applied Mathematics and Computational Science at the University of Pennsylvania. Her research is in the area of probability. She obtained B.S. in Mathematics from Beijing Normal University (2017), M.S. in Statistics and Ph.D. in Mathematics from University of California San Diego (2022). Her awards and honors include: 2022 Powell Dissertation Fellowship, UCSD; 2017 James B. Ax Graduate Fellowship, UCSD; 2016 China National Fellowship for Undergraduates.