



# 北京理工大学

## 数学与统计学院学术报告

### On Atypical Behaviors of Martingale Limits and Level Sets in Branching Random Walks

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**时间:** 2024年06月14日(周五)下午4:00-5:00

**地点:** 文萃楼E 311

**摘要:**

We consider a supercritical branching random walk on the real line in the so called kappa-case, where the additive martingale and derivative martingale both converge a.s. and in  $L^p$  ( $p > 1$ ) to some non-degenerate random variables. We study the tail behaviors of these martingale limits. We also discuss how this is related to the large deviation probabilities of the size of level sets. This is based on joint works with Xinxin Chen (BNU) and Loïc de Raphélis (Orléans)

**个人简介:** Heng MA is a PhD student at the School of Mathematical Science, Peking University. Currently, his research interests focus on probability models that incorporate tree structures.