

# 概率论系列报告

报告题目 (Title): Average entropy of the ranges for simple random walks on discrete groups

报告人 (Speaker): 谢践生 副教授 复旦大学

时间 (Time): 10月13日(周一) 下午 3:00-4:00

地点 (Venue): 北京大学理科一号楼 1418

摘要 (Abstract): In this talk we first introduce the notion of the average entropy of the ranges for simple random walks on discrete groups, which is inspired by the recent works of Benjamini et al. It is proved that, (1) The related average sample information converges almost surely (and also in  $L_1$ ) to the average entropy; (2) The average entropy is always zero for recurrent walks; (3) The average entropy is zero for a transient walk iff the walk is equivalent to a special transient walk on integers; for other transient walks, the average entropy is always positive; (4) The upper semi-continuity of the average entropy in the distribution is also proved.

This is Xin-Xing Chen and Min-Zhi Zhao.

欢迎参加