

# 概率论系列报告

报告题目 (Title): ON COVERING MONOTONIC PATHS WITH  
SIMPLE RANDOM WALK

报告人 (Speaker): 张原 博士 Texas A&M University

时间 (Time): 5月29日(周一)下午 3:00-4:00

地点 (Venue): 北京大学理科一号楼 1303

摘要 (Abstract): In this paper we study the probability that a  $d$ -dimensional simple random walk (or the first  $L$  steps of it) covers each point in a nearest neighbor path connecting  $0$  and the boundary of an  $L_1$  ball. We show that among all such paths, the one that maximizes the covering probability is the monotonic increasing one that stays within distance 1 from the diagonal. As a result, we can obtain an exponential upper bound on the decaying rate of covering probability of any such path when  $d \geq 4$ .

欢迎参加