

# 概率论系列报告

报告题目 (Title): Central Limit Theorem for Linear Statistics of  
Eigenvalues of Large Random Matrices

报告人 (Speaker): 李凌云 博士 University of California, Davis

时间 (Time): 12月14日(周一)下午 3:00-4:00

地点 (Venue): 北京大学理科一号楼 1479

摘要 (Abstract): Random Matrix Theory has important applications in Quantum Theory, Statistical Mechanics, Multivariate Statistical Analysis, Quantum Chaos, Theoretical Computer Science, and Mathematics.

In this talk, I will present two results we have proved recently:

1. The Central Limit Theorem for linear statistics of the eigenvalues of band random matrices provided  $\sqrt{n} \ll b_n \ll n$ .

2. The Central Limit Theorem for finite-dimensional vectors of linear eigenvalue statistics of submatrices of Wigner random matrices.

In both of the two results, we assume that the test functions are sufficiently smooth.

欢迎参加