复旦大学数学科学学院
数学综合报告会

报告题目：Infinite products of large random matrices

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时间：2021-01-08 星期五 9:30--10:30

地点：腾讯会议 ID: 472 771 235

报告摘要：

Products of M i.i.d. random matrices of size N relate classical limit theorems in Probability Theory (large M and N=1) to Lyapunov exponents in Dynamical Systems (large M and finite N), and to universality in Random Matrix Theory (finite M and large N). Under the two different limits of large M and large N, the eigenvalue statistics for the random matrix product display Gaussian and RMT universality, respectively. However, what happens if both M and N go to infinity simultaneously? This problem lies at the heart of understanding two kinds of universal limits. In this talk we examine it and investigate possible phase transition and critical phenomena.

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