



复旦大学数学科学学院 数学综合报告会

报告题目: Eigenvalues of p -adic random matrices

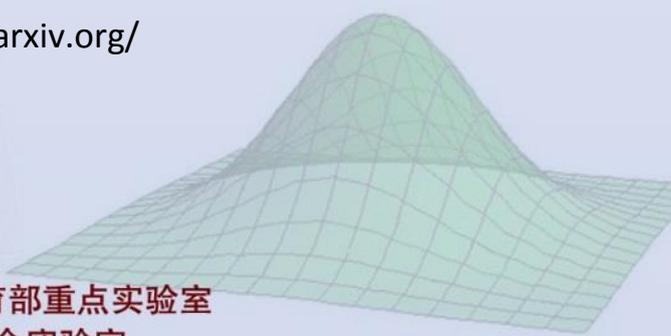
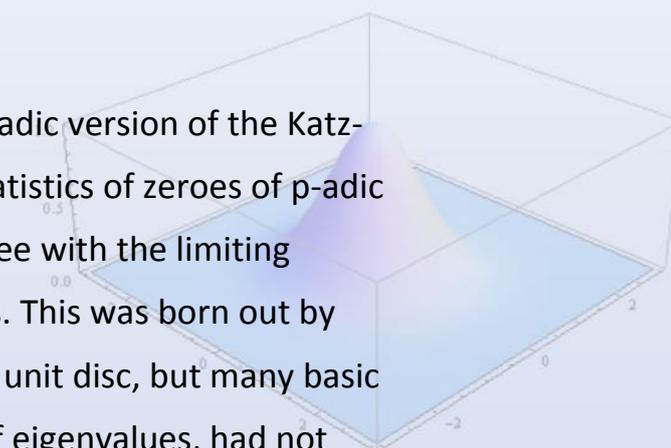
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时间: 2026-03-20 星期五 11:00--12:00

地点: 腾讯会议 ID: 495 851 493 密码: 200433

报告摘要:

Ellenberg-Jain-Venkatesh (2011) proposed a p -adic version of the Katz-Sarnak philosophy for usual L-functions: the statistics of zeroes of p -adic L-functions, averaged over families, should agree with the limiting eigenvalue statistics of p -adic random matrices. This was born out by numerical data on the number of zeroes in the unit disc, but many basic statistics, such as correlations between pairs of eigenvalues, had not been computed on the random matrix side. This talk will explain recent results on eigenvalues of p -adic random matrices, including a Jacobi theta function formula for the pair correlation, and the precise conjectures on zeroes of p -adic L-functions which come from these. This is my joint work with Roger Van Peski, <https://arxiv.org/abs/2601.06283>.



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