







## 复旦大学数学科学学院

## 数学综合报告会

报告题目: Optimal decay of eigenvector overlap for non-Hermitian random matrices

报告人:许媛媛 (中科院应用数学所)

时间: 2025-11-12 星期三 14:00-15:00

地点: 光华东主楼1801

## 报告摘要:

We consider the standard overlap of any bi-orthogonal family of left and right eigenvectors of a large random matrix with centred i.i.d. entries and we prove that it decays as an inverse second power of the distance between the corresponding eigenvalues. This extends similar results for the complex Gaussian ensemble from Bourgade and Dubach, as well as Benaych-Georges and Zeitouni, to any i.i.d. matrix ensemble in both symmetry classes. Based on a joint work with Giorgio Cipolloni and Laszlo Erdos.

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