复旦大学数学科学学院
数学综合报告会

报告题目： Sums and products of invariant ensembles

报告人：张纪元 (墨尔本大学)

时间：2020-12-02 星期三 13:30--14:30

地点：光华东主楼1801

报告摘要：

An invariant ensemble is a random matrix that is unchanged under an adjoint action of a group of invariance. In this talk we will focus on sums/ products of such ensembles, where general formulae for those eigenvalue probability density functions are provided, connecting eigenvalue PDFs to additive/multiplicative weights. There, a matrix addition/multiplication corresponds to convolution of their weights. Such connections can be shown for the additive spaces of the Hermitian, Hermitian antisymmetric, Hermitian anti-self-dual, and complex rectangular matrices as well as for the two multiplicative matrix spaces of the positive definite Hermitian matrices and of the unitary matrices. This is a joint work with Mario Kieburg (arXiv:2007.15259 [math-ph]).

非线性数学模型与方法教育部重点实验室
中法应用数学国际联合实验室
上海市现代应用数学重点实验室
复旦大学数学研究所