SINGULAR VALUE AND EIGENVALUE DENSITIES OF PRODUCTS OF RANDOM MATRICES

HOLGER KÖSTERS
University of Rostock, Germany
e-mail: holger.koesters@uni-rostock.de

Products of independent random matrices from classical ensembles from non-Hermitian random matrix theory have attracted a lot of attention in the last few years. As a result, it is meanwhile well-known that the joint densities of their singular values or of their eigenvalues may be calculated relatively explicitly, and they give rise to determinantal point processes. I will discuss an approach based on harmonic analysis on matrix spaces which makes it possible to unify and generalize these results. This is based on joint work with Yanik-Pascal Förster and Mario Kieburg.

References