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**Asymptotics of the averaged characteristic polynomial
for Ginibre Ensemble with finite number of fixed point charges**

Abstract

We consider the Ginibre Ensemble with a finite number of fixed point charges. The corresponding averaged characteristic polynomial of the Coulomb system has been identified with a multiple orthogonal polynomial (Type II).

We obtain the asymptotic of the polynomials using the matrix Riemann-Hilbert analysis where the size of the matrix is determined by the number of fixed point charges.

The work is a joint on-going project with Meng Yang (UC Louvain).