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Ioana Dumitriu, Massachusetts Institute of Technology

Numerical linear algebra methods in random matrix theory

The three types of matrix models found predominantly in "classical" Random Matrix Theory are the Hermite (or Gaussian), Laguerre (or Wishart), and Jacobi (or MANOVA) ensembles. In this talk I will describe these ensembles and present some recent results in the study of eigenvalue distributions of the Hermite and Laguerre types, which were obtained using methods developed in Numerical Linear Algebra.

I will conclude by describing some possible applications.