

abstract

SPECIAL SEMINAR LECTURE

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

We discuss the distribution of the extreme eigenvalues for several classes of large ($N \times N$) Hermitian random matrices. For a class of sparse matrices, the distribution is approximately Tracy--Widom. For band matrices with band width $W(N)$, the distribution is approximately Tracy--Widom if and only if $W(N) \gg N^{\{5/6\}}$. These results are coherent with the Thouless criterion for localization, adapted to band matrices by Fyodorov and Mirlin (which we shall hopefully also discuss).