

Contribution Title:	UNIVERSALITY OF SPECTRAL STATISTICS FOR CERTAIN WIGNER RANDOM MATRICES
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The local eigenvalue statistics of the Gaussian Unitary Ensemble (GUE) is given by Dyson's celebrated sine kernel. The universality conjecture states that this law also holds for a much more general class of random matrices. For matrix ensembles that are unitarily invariant, there has been a great progress using techniques from the theory of orthogonal polynomials. In general, hermitian matrices with independent identically distributed entries (Wigner ensembles) are not unitarily invariant. Johansson has proved the sine kernel for N by N matrices that are of the form $H + sV$, where H is a Wigner matrix and V is an independent GUE matrix. The parameter s was required to be of order one. Our main result states that Dyson's sine kernel holds even for $s^2 \geq N^{-3/4+\varepsilon}$, with some $\varepsilon > 0$, i.e. for hermitian Wigner matrices with a Gaussian perturbation with variance larger than $N^{-3/4+\varepsilon}$. Our approach is based on techniques from interacting particle systems combined with our previous results on the local semi-circle law and level repulsion for Wigner random matrices. We remark that the universality conjecture for general Wigner matrices could be deduced from the case $s^2 \ll N^{-1}$ which is still an open problem.