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*Asymptotic zero distribution of random orthogonal polynomials*

We consider random polynomials of the form  $H_n(z) = \sum_{j=0}^n \xi_j q_j(z)$  where the  $\{\xi_j\}$  are i.i.d. non-degenerate complex random variables, and the  $\{q_j(z)\}$  are orthogonal polynomials ( $\deg q_j = j$ ) with respect to an appropriate compactly supported measure in the plane. The problem is to understand (probabilistically) the behavior of the zeros of  $H_n$  as  $n \rightarrow \infty$ .

Study of the Kac Ensemble, (when  $q_j(z) = z^j$ ) goes back to the 1950's.

I will present recent results on the almost sure convergence and the convergence in probability of the zeros. This is work of Ibragimov and Zaporozhets, D. Dauvergne and myself.