Delocalization of eigenvectors of random matrices with independent entries

Mark Rudelson

Let A be an n by n random matrix with independent centered entries having exponential type tail decay and unit variances. We prove that, with high probability, the eigenvalues of A are delocalized, i.e., all coordinates of any unit eigenvector have the magnitude $O(n^{-1/2})$ up to logarithmic terms.

Joint work with Roman Vershynin.