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Sean O'Rourke* (sean.orourke@yale.edu). *Large random matrices with non-independent entries.*

The circular law asserts that if X_n is a $n \times n$ matrix with iid complex entries of mean zero and unit variance, then the empirical spectral distribution of $\frac{1}{\sqrt{n}}X_n$ converges almost surely to the uniform distribution on the unit disk in the complex plane as n tends to infinity. In this talk, I will consider what happens when the independence assumption on the entries is weakened. In some cases, the limiting distribution will no longer be the circular law. This is joint work with Hoi Nguyen and David Renfrew. (Received September 16, 2013)