Stanford University  
Departments of Mathematics and Statistics  

PROBABILITY SEMINAR  

4:15pm, Monday, October 27, 2014  
Sequoia Hall Room 200  
Cookies served at 3:45pm, 1st floor Lounge.

Speaker: Elizabeth S. Meckes  
Department of Mathematics, Applied Mathematics, and Statistics,  
Case Western Reserve University

Title: Uniformity of eigenvalues of some random matrices

Abstract:  
I will discuss a circle of ideas leading to rates of convergence of the empirical spectral measures of many random matrix ensembles. In particular, I will focus on results for Wigner matrices, powers of random matrices from the compact classical matrix groups, and the complex Ginibre ensemble. The common threads around which approaches to the different ensembles crystallize are some remarkable properties of determinantal point processes and ideas from the theory of concentration of measure.