

1106-60-1521      **Turgay Bayraktar\*** (tbayrakt@syr.edu), 215 Carnegie Building, Syracuse, NY 13244-1150.  
*Asymptotic Zero Distribution of random polynomials.*

A classical result due to Kac and Hammersley asserts that zeros of a random complex polynomial tend to accumulate on the unit circle as its degree grows provided the coefficients are i.i.d. standard real or complex Gaussians. In this talk, I will discuss the asymptotic zero distribution of random combinations of orthogonal polynomials in several complex variables. I will explain how one can prove new results by means of pluri-potential theory. Namely, normalized zero measures of  $m$  i.i.d random polynomials, orthonormalized on a regular compact set  $K \subset \mathbb{C}^m$ , are almost surely asymptotic to the equilibrium measure of  $K$ . (Received September 13, 2014)