1161-60-300   **Andrew Thomack*** (`andrew.thomack@greenville.edu`). *The Asymptotic Growth of the Expected Number of Zeros of Random Harmonic Polynomials.*

A harmonic polynomial is a complex function of the form $h(z) = p(z) + \overline{q(z)}$ where p and q are complex analytic polynomials. We build off of work by Li and Wei, using the Kac-Rice formula to study the expected number of zeros for different models of random harmonic polynomials. Our main focus is the asymptotic growth of the number of zeros of these polynomials as the degree increases, but in this talk we will also look at the shape of the first intensity functions of several models of random harmonic polynomials and note how they compare to their analytic analogs. (Received August 18, 2020)

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