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**Speaker:** Henry Towsner  
University of Pennsylvania

Tuesday, March 31, 2015  
2:00 PM  
125 Hayes-Healy Hall

**Title:** An Analytic Approach to Quasirandom (Hyper)graphs

**Abstract:**

Many equivalent characterizations of quasirandom graphs have been studied, and the notion of a quasirandom is quite robust. When generalized to hypergraphs, however, these notions split in a partially ordered union of different families. The ultraproduct setting, equipped with Loeb measure, turns out to be a natural place to examine these notions. We are able to give a uniform characterization of all known notions of hypergraph quasirandomness involving sigma algebras generated by definable sets and to resolve and generalize several conjectured equivalences between different notions.