Some new results on the extremal spectral graph theory

常安
福州大学

Given an r-graph F, we say that an r-graph H is F-free if H does not contain F as a subgraph of H. The Turan number $ex(n, F)$ is the maximum number of edges of an F-free r-graph on n vertices. Meanwhile the Turan density of F is defined as $\pi(F) = \lim ex(n, F)/\binom{n}{r}$. Determining Turan number of graphs or hypergraphs is perhaps the most fundamental open problem in the extremal hypergraph theory. In this talk, we present some new results which established the asymptotic behavior of the Turan problem of r-uniform linear hypergraphs by tensor spectral methods.