1147-15-875 **Han Huang*** (sthhan@umich.edu) and **Mark Rudelson**. *On the size of nodal domains for Erdős–Rényi graph G(n, p).*

Let A be the adjacency matrix of a Erdős–Rényi graph G(n, p). A Nodal Domain D corresponding to an eigenvector u=(u(1),...,u(n)) of A is a maximal connected subgraph of G(n, p) such sign[u(i)]=sign[u(j)] whenever i,j lies in D. It was shown by Dekel, Lee and Linial that with high probability there are only two nodal domains. In this talk, we would like to show these two nodal domains have roughly the same size n/2. Based on a joint work with Mark Rudelson. (Received January 29, 2019)