Alexander Soshnikov (University of California at Davis)

Title: On the Largest Eigenvalue of a Random Subgraph of the Hypercube

Abstract: We consider a random subraph G of the n-cube where each edge appears independently with probability p and prove that the largest eigenvalue of the adjacency matrix is $\max(\sqrt{\Delta(G)}, np)(1 + o(1))$, where $\Delta(G)$ is the maximum degree of G. The result is a joint work with Benny Sudakov.