William Yang
william_yang@berkeley.edu
3031801969

I was able to attend all of the meetings, except for the one on an SDP algorithm for recovering communities in a stochastic block model graph. I primarily studied the papers and notes relevant for my own presentations, but skimmed over some of the relevant material for some of the other presentations as well. I presented on the max clique in a random graph, specifically regarding the size of the max clique for a graph $G \sim \mathcal{G}_{n,\frac{1}{2}}$, and the derivations of the upper and lower bounds on the size of the max clique, using Markov's inequality and the second moment method, respectively. I also presented on the AKS spectral algorithm for recovering a planted clique, specifically on the correctness of the algorithm in the rounding procedures done to recover the clique.

I've attached following the notes for the presentations I presented on. We all collaborated equally on all the presentations. An implementation of the AKS spectral algorithm for recovering a planted clique from a $\mathcal{G}_{n,\frac{1}{2}}$ was also coded up here by Wilson.