Abstract: Random walks are a fundamental area of study in pure math, and they undergird the technique called Markov chain Monte Carlo (MCMC) that drives a huge range of statistical applications in science, engineering, and industry. I’ll explain how MCMC found its way into the redistricting conversation, and I’ll introduce a new Markov chain called ”Recombination”—a graph partition chain designed for redistricting—and contrast that with the standard ”Flip” chain. Along the way, I hope to explain some tradeoffs and debates in the use of math models in politics, policy, and law.

There will be a Q&A session aimed at graduate students from 4:30 to 5:30 in 636 SEO.