
MIKE NEWMAN, University of Ottawa

Matroid Asymptotics

We consider the properties of a random matroid: what does it look like? It turns out that very little is known, in stark contrast to random graphs, or even random matroids over a fixed finite field.

We show that asymptotically at least half of all matroids are connected, and outline some ideas that might be able to prove the “truth”, that is that a.a.s. all matroids are connected, or even highly connected. We make several conjectures on properties that should hold a.a.s. for all matroids. We also describe a possible approach to generating a random matroid that is work in progress.

This is joint work with Dillon Mayhew, Dominic Welsh and Geoff Whittle.