

Department of Mathematics, BGU

Probability and ergodic theory (PET)

On *Tuesday, May ,3 2016*

At *10:50 – 12:00*

In *Math 101-*

Ariel Yadin (BGU)

will talk about

The critical point for percolation on groups

Abstract: I will discuss a conjecture of Benjamini & Schramm from :1996 Any Cayley graph has a non-trivial critical point for percolation (i.e. $p_c < 1$) unless the underlying group is a finite extension of \mathbb{Z} .

I will try to present a strategy to prove this conjecture (in fact some stronger form of it), that involves the notion of EIT = exponential intersection tail measures. Hopefully, all the notions involved (percolation, the critical point p_c , EIT, etc.) will be explained. The aim is to learn these notions and perhaps discuss the weakness or plausibility of the strategy proposed.