Department of Mathematics, BGU

Probability and ergodic theory (PET)

On Tuesday, April ,12 2016

At 10:50 – 12:00

In Math 101-

Yair Glasner (BGU)

will talk about

On isolated subgroups and generic permutation representations.

Abstract: The subspace Sub(G) of all subgroups of a countable group G admits a natural structure of a compact metrizable space called the Chabauty space of G. What does the topological structure of the Chabauty space tell us about the algebraic structure of the group G?

A subgroup of Sub(G) is called isolated fi it corresponds to an isolated subgroup of G. Isolated subgroups are very special from an algebraic point of view. A group G is called solitary fi the isolated points are dense in Sub(G). I will show how the solitary condition is reflected in a surprising way in the permutation representation theory of G. And show how for finitely generated groups the notion of solitary groups generalizes the notion of LERF (subgroup separable) groups.

The talk is based on a joint work with Daniel Kitroser and Jullien Melleray.