

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 $\text{Sub}(G)$ 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 $\text{Sub}(G)$ is called isolated if 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 if the isolated points are dense in $\text{Sub}(G)$. 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.