Department of Mathematics, BGU

Logic, Set Theory and Topology

On *Tuesday, March ,22 2016*

At *12:30 – 13:45*

In *Math 101-*

Itay Kaplan (HUJI)

will talk about

Dp-minimal omega-categorical groups are nilpotent-by-finite

Abstract: (joint work with Elad Levi and Pierre Simon) Macpherson proved that omega-stable omega-categorical groups are nilpotent-by-finite. Krupinski and Krupinski with Dobrowolski (in two separate works, one with NIP, the other without) replaced the stability assumption by the much weaker assumption of being generically-stable. We go to the other direction, and try to generalize Krupinski's first result (NIP omega-categorical groups with fsg are nilpotent-by-finite) to remove the fsg assumption. We succeed in the simplest NIP case, i.e., when the group is dp-minimal.

I will try to give a full proof of this result. All concepts will be defined during the talk, but some basic knowledge of model theory (e.g., omega categorical theories) might be helpful.