Department of Mathematics, BGU

Logic, Set Theory and Topology

On *Mar ,8 2016*

At *12:15 – 13:30*

In *Math 101-*

Assaf Hasson (BGU)

will talk about

On Zilber's restricted tirchotomy principle - part 1

Abstract: Zilber's trichotomy conjecture, asserting roughly, that a non-locally modular strongly minimal set is an algebraic curve over an algebraically closed field, was thoroughly refuted by Hrushovski in .1988 Nevertheless, the ideology underlying Zilber's conjecture remains one of the most influential (and most successful) classfiying principles in model theory. In the first talk I will explain Zilber's trichotomy conjecture and its history, focusing on various restricted versions of the principle.

In the second talk I will discuss a long term project of classfiying, along Zilber's trichotomy, all structures interpretable in o-minimal theories. I will describe the main ideas in a recent result (joint with Eleftheriou and Peterzil) proving that fi $(G,+)$ is a commutative complex Lie group and $G_S:=(G, ,+ S)$ is a strongly minimal non locally modular structure interpretable in an o-minimal expansion of the reals, then G_S interprets an algebraically closed field.

Please Note the Unusual Time!