

Department of Mathematics, BGU

Logic, Set Theory and Topology

On Tuesday, December 15 2015

At 12:15 – 13:40

In Math 101-

Grzegorz Jagiella (Hafia University)

will talk about

Definable topological dynamics and o-minimality

Abstract: Fix a model M . For an M -definable group G acting definably and transitively on a definable set X , we can consider the induced action on the space $S_X(M)$ of types on X . This is an action by homeomorphisms (where $S_X(M)$ is equipped with the standard Stone space topology), making the pair $(G(M), S_X(M))$ a $G(M)$ -flow in the sense of classic topological dynamics. I will discuss how various notions of topological dynamics are interpreted in the sense of model theory. I will then present the results on the universal definable flows of groups definable in an o-minimal setting (e.g. definable real Lie groups).