Department of Mathematics, BGU

Logic, Set Theory and Topology

On *Tuesday, December ,8 2015*

At *12:15 − 13:40*

In *Math 101-*

Thilo Weinert (Ben-Gurion University of the Negev)

will talk about

Partition Relations for Linear Orders - Part 2/2

Abstract: Finite Ramsey Theory is nowadays quite ubiquitous in Combinatorics. This can be claimed at least to some extent for Infinite Ramsey Theory within Set Theory as well. Most considerations within Infinite Ramsey Theory, however, treat the size of a homogeneous set as given by its cardinality. Considering ordered sets can be considered as a variation of this topic but by treating cardinals as initial ordinals it can also be viewed as a generalisation.

In the first talk I will provide historical background, notations and definitions on Ramsey Theory in this generalised context. Moreover I am going to state some classical results.

In the second talk I am going to focus on linear orderings which are neither well-orderings nor anti-well-orderings, present results by Erdős, Milner and Rado from 1971 and present some recent results from joint work with Philipp Lücke and Philipp Schlicht.