Department of Mathematics, BGU

Logic, Set Theory and Topology

On *Tuesday, April ,25 2017*

At *12:15 – 13:30*

In *Math 101-*

Nicholas Ramsey (UC Berkeley)

will talk about

NSOP_1 Theories

Abstract: The class of NSOP_1 theories was isolated by Džamonja and Shelah in the mid-90s and later investigated by Shelah and Usvyatsov, but the theorems about this class were mainly restricted to its syntactic properties and the model-theoretic general consensus was that the property SOP_1 was more of an unimportant curiosity than a meaningful dividing line. I'll describe recent work with Itay Kaplan which upends this view, characterizing NSOP_1 theories in terms of an independence relation called Kim-independence, which generalizes non-forking independence in simple theories. I'll describe the basic theory and describe several examples of non-simple NSOP_1 theories, such as Frobenius fields and vector spaces with a generic bilinear form.