

Department of Mathematics, BGU

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# Model theory working seminar

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*On Wednesday, December ,24 2025*

*At 12:10 – 14:00*

*In Room 4*

Misha Gavrilovich

will talk about

## **Simplicial reformulations of equivalent characterisations of stable first order theories**

Abstract: I shall give simplicial reformulations of several equivalent characterisations of stability of a first order theory. In particular, I shall reformulate without any word of logic the statement of the Sela's theorem that the theory of a free group is stable.

I will make an effort to be self-contained and remind the definitions of my previous talk. In particular, I shall define a semantics of first order formulas with respect to any simplicial set, where a predicate is assigned a subset of simplices rather than n-tuples. From this point of view, the type space functor defined last time, is the canonical model of a first order theory.