## Department of Mathematics, BGU

## Logic, Set Theory and Topology

On Tuesday, June ,9 2015

At 12:15 - 13:40

**In** *Math* 101-

Inbar Marom (BGU)

will talk about

## The Suslin hypothesis

Abstract: Suslin hypothesis states that every totally ordered set that has no uncountable collection of disjoint open intervals, can be (order) embedded into the real line. I will show that in L (the Constructible universe) the negation of this hypothesis holds, by building a Suslin tree from the diamond principle, and contradict the hypothesis from the existence of Suslin tree.