

# Topology Seminar

**Tomer Schlank**

of MIT will be speaking on

## Obstruction Theory for Topoi and Sections for (Pro)finite Group

on November 5 at 4:30 in  
MIT Room 2-131

Given a fibration  $f : X \rightarrow S$  of CW-complexes one can use Eilenberg obstruction theory to study the spaces of sections of  $f$ . These obstruction theory give rise to obstructions to the existence of a section lying in the groups  $H^{s+1}(S, \pi_s(F))$  where  $F$  is the fibre of  $f$ . A topos is a generalization of the concept of topological space which is ubiquitous in algebraic geometry. In the talk I shall present joint work with I. Barnea generalizing Eilenberg obstruction theory for sections of maps of topoi  $f : X \rightarrow S$ . If time permits I will describe applications to Galois theory of number fields.