## **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  $f: X \to S$  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  $f: X \to S$ . If time permits I will describe applications to Galois theory of number fields.