Toplogy 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.