

Topology Seminar

Joseph Hirsh

of MIT will be speaking on

Model structures for coalgebras

on December 1 at 4:30 in
MIT Room 2-131

Classically, there are two model category structures on coalgebras in the category of chain complexes over a field. In one, the weak equivalences are maps which induce an isomorphism on homology. In the other, the weak equivalences are maps which induce a weak equivalence of algebras under the cobar functor. We unify these two approaches, realizing them as the two extremes of a partially ordered set of model category structures on coalgebras over a cooperad satisfying mild conditions.