

TOPOLOGY SEMINAR

Guest Speaker: Eva Belmont
Northwestern University

Date: Tuesday, December 4, 2018

Time: 11:45 AM

Location: 125 Hayes-Healy Hall



Lecture Title:

Localizing the E_2 page of the Adams spectral sequence

Abstract

Localizing the E_2 page of the Adams spectral sequence The Adams spectral sequence is one of the central tools for calculating the stable homotopy groups of spheres, one of the motivating problems in stable homotopy theory. In this talk, I will discuss an approach for computing the Adams E_2 page for the sphere at $p = 3$ in an infinite region, by computing its localization by the non-nilpotent element b_{10} . This approach relies on computing an analogue of the Adams spectral sequence in Palmieri's stable category of comodules, which can be regarded as an algebraic analogue of stable homotopy theory. This computation fits in the framework of chromatic homotopy theory in the stable category of comodules.