

TOPOLOGY SEMINAR

Guest Speaker: Danny Shi
Harvard University

Date: Tuesday, November 6, 2018

Time: 2:30 PM

Location: 258 Hurley Hall



Lecture Title:

Real Orientations of Lubin-Tate Spectra and the Slice Spectral Sequence of a Height 4 Theory

Abstract

Talk I: 2:30-3:30 Talk II: 4:00-5:00 We show that Lubin-Tate spectra at the prime 2 are Real oriented and Real Landweber exact. The proof is an application of the Goerss--Hopkins--Miller theorem to algebras with involution. For each height n , we compute the entire homotopy fixed point spectral sequence for E_n with its C_2 -action by the formal inverse. We study, as the height varies, the Hurewicz images of the stable homotopy groups of spheres in the homotopy of these C_2 -fixed points. Then, I will talk about the slice spectral sequence of a C_2 -equivariant spectrum. This spectrum is a variant of the detection spectrum of Hill--Hopkins--Ravenel and is very closely related to the height 4 Lubin--Tate theory.