Department of Mathematics
University of Notre Dame

TOPOLOGY SEMINAR

Guest Speaker: James Quigley
University of Notre Dame

Date: Tuesday, October 2, 2018
Time: 2:30 PM
Location: 258 Hurley Hall

Lecture Title:
The parametrized Tate construction

Abstract
The Tate construction is a powerful tool in classical homotopy theory with applications to the Segal Conjecture, the Mahowald invariant, blueshift, and algebraic K-theory. In this talk, I will describe an enhancement of the Tate construction to equivariant homotopy theory called the "parametrized Tate construction." I will describe the category of objects where this construction is defined and discuss some classical examples. I will then discuss equivariant analogs of the above applications, including C_2-equivariant versions of Lin's Theorem and the Mahowald invariant, blueshift for Real oriented spectra (joint work with Guchuan Li and Vitaly Lorman), and trace methods for Real algebraic K-theory (work-in-progress with Jay Shah).

James Quigley - University of Notre Dame