

## Algebra/Topology Seminar

Brenda Johnson Union College

A Tale of Two(?) Towers

Thursday, March 27, 2014 1:15 p.m. in ES-143

ABSTRACT. Goodwillie's calculus of homotopy functors provides a way to approximate a homotopy functor of spaces with a sequence of functors, called a Taylor tower, satisfying certain excision conditions. In this talk, I will describe the basic properties of this tower, and a related "discrete" Taylor tower that arises in algebraic contexts. I will show how these towers are related to classical constructions such as stable homotopy theory and André-Quillen homology, and discuss recent work determining the extent to which these towers are the same.