

# Topology Seminar

**Zhulin Li**

of MIT will be speaking on

## Unstable modules with only the top $k$ Steenrod operations

on April 12 at 4:30 in  
MIT Room Zoom

In this talk, I will introduce unstable modules with only the top  $k$  Steenrod operations at the prime 2. I'll show that they have projective dimension at most  $k$ . Then I'll establish forgetful functors, suspension functors, loop functors and Frobenius functors between such modules. The forgetful functors induce an inverse system of Ext groups, and the inverse system stabilizes when the covariant module is bounded above. In addition, I will talk about a generalization of the Lambda algebra which computes the Ext group from such modules to suspensions of the base field.