

# Topology Seminar

**Kyle Ormsby**

of MIT will be speaking on

## Motivic Brown-Peterson invariants of the rationals

on October 1 at 4:30 in  
MIT Room 2-131

The motivic truncated Brown-Peterson spectra  $BP\langle n \rangle$  interpolate between motivic cohomology ( $BP\langle 0 \rangle$ ), algebraic K-theory ( $BP\langle 1 \rangle$ ), and the motivic Brown-Peterson spectrum itself, a close relative of algebraic cobordism. We use the motivic Adams spectral sequence and global-to-local comparison maps to compute the  $BP\langle n \rangle$ -homology of the rational numbers. Along the way, we prove a Hasse principle for the motivic  $BP\langle n \rangle$  and deduce several classical and recent theorems about the algebraic  $K$ -theory of particular fields. This is joint work with Paul Arne Østvær.