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<n> interpolate between motivic cohomology (BP<0>), algebraic K-theory (BP<1>), 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<n>-homology of the rational numbers. Along the way, we prove a Hasse principle for the motivic BP<n> and deduce several classical and recent theorems about the algebraic K-theory of particular fields. This is joint work with Paul Arne Østvær.