

Topology Seminar

Kyle Ormsby

of Reed College will be speaking on

Vanishing in motivic stable stems

on October 3 at 4:30 in
MIT Room 2-131

Recent work of Röndigs-Spitzweck-Østvær sharpens the connection between the slice and Novikov spectral sequences. Using classical vanishing lines for the E_2 -page of the Adams-Novikov spectral sequence and the work of Andrews-Miller on the η -periodic ANSS, I will deduce some new vanishing theorems in the bigraded homotopy groups of the η -complete motivic sphere spectrum. In particular, I will show that the m th η -complete Milnor-Witt stem is bounded above (by an explicit piecewise linear function) when $m = 1$ or $2 \pmod{4}$. This is joint work with Oliver Röndigs and Paul Arne Østvær.