

Topology Seminar

J.D. Quigley

of Cornell will be speaking on

The motivic kq -resolution

on October 21 at 4:30 in
MIT Room 2-131

(Joint work with Dominic Culver) Let kq denote the very effective cover of Hermitian K-theory. The kq -based motivic Adams spectral sequence, or kq -resolution, is a motivic analog of Mahowald's bo -resolution. We applied the kq -resolution in the C -motivic setting to calculate the η -periodic stable stems (recovering results of Andrews, Guillou, Isaksen, and Miller) and v_1 -periodic stable stems. I will summarize these calculations and discuss work in progress towards analogous results over general base fields and in the C_2 -equivariant setting. In addition to large-scale calculations of periodic phenomena, the kq -resolution can be used to calculate low-dimensional 2-complete Milnor-Witt stems. I will present some calculations in the C - and R -motivic settings (recovering results of Dugger-Isaksen), then discuss work in progress towards analogous results over general base fields and the 2-complete version of calculations of Røndigs-Spitzweck-Østvaer.

For information, write: araminta@mit.edu