Topology Seminar

Kyle Ormsby

of MIT will be speaking on

Equivariant motivic homotopy and the completion problem for Hermitian K-theory

on October 18 at 4:30 in
MIT Room 2-131

I will discuss the (motivic, or A^1) homotopy theory of G-equivariant schemes, G a finite group. Stabilizing with respect to regular representation of spheres produces a good stable theory which, in the case $G = Z/2$, contains motivic analogues of Atiyah's Real K-theory and Araki's Real cobordism over arbitrary characteristic 0 base fields. The algebraic Real K-theory spectrum is closely related to Hermitian K-theory (a.k.a. higher Grothendieck-Witt theory). Tools from stable equivariant topology like the Tate diagram and slice spectral sequence allow us to resolve the completion (or homotopy limit) problem for the Hermitian K-theory of fields.