Topology Seminar

Emanuele Dotto

of MIT will be speaking on

Equivariant calculus of functors

on May 11 at 4:30 in
MIT Room 2-131

Let G be a finite group. There is a notion of "J-excision" of functors on pointed G-spaces, for every finite G-set J. When J is the trivial G-set with n elements it agrees with Goodwillie's definition of n-excision. When $J = G$ it recovers Blumberg's notion of equivariant excision.

The talk will focus on the J-excisive approximations of a homotopy functor, and how they fit together into a "Taylor tree". We will discuss the convergence of the tree, as well as possible classifications of J-homogeneous functors. Finally, we will relate the layers of the "genuine" tower of the identity functor on pointed G-spaces to partition complexes, and discuss possible applications of $\mathbb{Z}/2$-calculus to Real algebraic K-theory.