

# 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.