Mathematics, Statistics, and Computer Science **@ UIC**

Algebraic K-Theory Seminar

Mackey functors, calculus and Adams operations

Saul Glasman (University of Minnesota)

Abstract: If F is an n-excisive functor from spectra to spectra, then the cross effects of F form a Mackey functor indexed on a certain category which shares many properties with the orbit category of a finite group; F can be recovered from this Mackey functor, and this correspondence forms an equivalence of categories. I'll give a description of this equivalence; since this indexing category in some sense encodes the combinatorics of cross terms, it might be expected that Adams operations can be understood in these terms, and I'll give some indications in this direction, touching on joint work in progress with Clark Barwick, Akhil Mathew and Thomas Nikolaus. If time permits I'll give further applications to stable power operations coming from joint work in progress with Tyler Lawson.

Wednesday, February 22 at 1:00 PM in SEO 1227