

TOPOLOGY SEMINAR

Anna Marie Bohmann (Northwestern)

Graded Tambara functors

Tuesday, February 5th, 4:00pm, in 383-N

Abstract: Let G be a finite group. If E is a G -spectrum, then the homotopy groups of E should properly be thought of as “Mackey functors,” rather than abelian groups. If E is a G -ring spectrum, recent work of Strickland and of Brun shows that the multiplication makes the zeroth homotopy groups into a “Tambara functor.” I will discuss current work with V. Angeltveit on extending these ideas to higher homotopy groups. This gives the notion of an $RO(G)$ -graded Tambara functor, which encodes the full structure of the homotopy groups of a G -ring spectrum. We will begin with a discussion of Mackey functors and Tambara functors before tackling the more general versions.