

Topology Seminar

Srinikanth Iyengar

of University of Nebraska will be speaking on

Colocalizing subcategories of the
stable module category of (possibly
infinite dimensional) modules over a
finite group

on November 15 at 4:30 in
MIT Room 2-131

I will describe recent work with Dave Benson and Henning Krause wherein we classify colocalizing subcategories of $\text{StMod}(kG)$, for a finite group G , in the spirit of earlier work by Hopkins, Neeman, and Benson, Carlson, and Rickard on thick subcategories and localizing subcategories in various contexts. A central result in our work is a criteria for the vanishing of a function object, $\text{Hom}_k(M, N)$, in $\text{StMod}(kG)$, in terms of geometric data (to be precise: support and co-support) associated to M and N , via local cohomology and completion functors on the stable module category.