

Meeting: 1006, Lubbock, Texas, SS 4A, Special Session on Homological Algebra and Its Applications

1006-13-72 **Sean M. Sather-Wagstaff*** (swagstaff@math.unl.edu), Department of Mathematics, 203 Avery Hall, University of Nebraska-Lincoln, Lincoln, NE 68588-0190. *The finiteness and structure of the set of semidualizing modules.* Preliminary report.

Semidualizing modules were introduced by Foxby and Golod as generalizations of the canonical module of a Cohen-Macaulay ring. These modules are singled out for having interesting duality properties and have been shown to have potential applications to the study of Auslander and Bridger's G-dimension. We will present recent progress toward an understanding of the overall structure of the set of semidualizing modules over a local ring. (Received February 03, 2005)