

1051-13-233

Anders J. Frankild, Sean Sather-Wagstaff and Amelia Taylor*

(amelia.taylor@coloradocollege.edu), Department of Mathematics, Colorado College, 14 E. Cache la Poudre St., Colorado Springs, CO 80903. *Vanishing of Ext and Reflexivity.*

I will discuss a natural generalization of a question posed by Avramov, Buchweitz and Sega, that is: Given two semidualizing complexes B and C over a commutative Noetherian ring R does the vanishing of $\text{Ext}_R^n(B, C)$ for $n \gg 0$ imply B is C -reflexive? The investigation of this question leads to a natural equivalence relation on the set of (isomorphism classes of) semidualizing complexes. I will describe some aspects of this relation. I will also discuss some results related to the core question, including some special cases. (Received August 25, 2009)