

1030-13-111

Sean Sather-Wagstaff* (Sean.Sather-Wagstaff@ndsu.edu), Department of Mathematics, 300 Minard Hall, North Dakota State University, Fargo, ND 58105-5075, and **Diana White** (s-dwhite14@math.unl.edu). *Complete intersection dimension and Auslander classes*. Preliminary report.

Let R be a local ring and M a finitely generated R -module of finite complete intersection dimension. Using a recent result of Frankild and Sather-Wagstaff, we show that M is C -reflexive and is in the Auslander class $A_C(R)$ for each semidualizing R -complex C . This greatly increases the number of modules known to have these properties. From this result, we deduce the following generalization of a theorem of Avramov and Foxby: If $\varphi: R \rightarrow S$ and $\psi: S \rightarrow T$ are local ring homomorphisms such that φ has finite G-dimension and ψ has finite complete intersection dimension, then the composition $\psi\varphi$ has finite G-dimension. (Received July 25, 2007)