

1041-13-154

Sean Sather-Wagstaff* (Sean.Sather-Wagstaff@ndsu.edu), Department of Mathematics, 300 Minard Hall, North Dakota State University, Fargo, ND 58105-5075, and **Dave Jorgensen** and **Graham Leuschke**. *Gorenstein presentations and semidualizing modules*. Preliminary report.

It is well known that a Cohen-Macaulay local ring admits a dualizing module if and only if it is a homomorphic image of a Gorenstein ring. We augment this result by showing that such a ring admits a nontrivial semidualizing module if and only if it admits a Gorenstein presentation Q/I such that the ideal I has a nontrivial decomposition. (Received August 09, 2008)