1047-13-315 David Jorgensen, Graham J Leuschke* (gjleusch@math.syr.edu) and Sean Sather-Wagstaff. Dualizing modules and Gorenstein presentations. 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 February 01, 2009)