1009-13-57   **Sean M Sather-Wagstaff*** (`ssather@math.uiuc.edu`), Department of Mathematics, California State University, Dominguez Hills, 1000 E. Victoria St., Carson, CA 90747, and **Anders Frankild** (`frankild@math.ku.dk`), University of Copenhagen, Copenhagen, Denmark. *Incomparability of semidualizing modules.* Preliminary report.

Two standard dualities over a local Cohen-Macaulay ring R are given by $\mathrm{Hom}_R(-, R)$ and $\mathrm{Hom}_R(-, D)$ where D is a dualizing module. Semidualizing modules arise naturally as common generalizations of the modules R and D, and have nontrivial applications to the understanding of ring homomorphisms of finite G-dimension. The set $\mathfrak{S}_0(R)$ of isomorphism classes of semidualizing R-modules admits an ordering based on certain reflexivity relations. We present recent advances toward the understanding of this ordering stemming from our construction of a metric on the set $\mathfrak{S}_0(R)$. (Received August 01, 2005)