1114-13-263　　　　　**Hannah Altmann*** (`haltmann@morris.umn.edu`). *Semidualizing DG Modules over Tensor Products.*

Let R be a commutative, noetherian ring with identity. A finitely generated R-module C is *semidualizing* if the homothety map $\chi_C^R : R \to \operatorname{Hom}_R(C, C)$ is an isomorphism and $\operatorname{Ext}_R^i(C, C) = 0$ for all $i > 0$. For example, R is semidualizing over R, as is a dualizing module, if R has one. In some sense the number of semidualizing modules measures the severity of the singularity of R. We are interested in that number. We can extend this idea to semidualizing complexes of R and generalize even further over Differential Graded (DG) algebras. We will discuss constructing semidualizing DG modules over tensor products of algebras over a field. In particular, this gives us a lower bound on the number of semidualizing DG modules over the tensor product. (Received August 30, 2015)