1068-13-302 Livia Hummel* (hummell@uindy.edu), 1400 East Hanna Ave, Indianapolis, IN 46227. The homological dimensions of coherent Gorenstein rings. Preliminary report.

Totally reflexive modules and Gorenstein homological dimensions have played an important role in the development of the theory of non-Noetherian Gorenstein rings. Coherent Gorenstein rings are also linked to the coherent rings of finite FP-injective dimension studied by Ding and Chen. This talk will discuss connections between recent work in homological dimensions and characterizations of Gorenstein rings, as well as influences laying the groundwork for a notion of coherent complete intersection rings. (Received January 19, 2011)