1053-13-301 Livia Hummel* (hummell@uindy.edu), Department of Mathematics and Statistics, 215 Lilly Hall, 1400 East Hanna Avenue, Indianapolis, IN 46227. Characterizations of Coherent Gorenstein Rings.

Auslander and Bridger proved that local Noetherian Gorenstein rings are characterized by every ideal having finite Gorenstein dimension. The theory of coherent Gorenstein rings is based on this characterization, and requires a generalization of Gorenstein dimension and the Auslander-Bridger formula. In this talk I introduce this theory of coherent Gorenstein rings and explore its relation to other familiar characterizations of Gorenstein rings. (Received September 07, 2009)