

1046-13-1197      **Livia Hummel\*** ([hummell@uindy.edu](mailto:hummell@uindy.edu)), Lilly Hall 215, 1400 Hanna Ave, Indianapolis, IN 46227,  
and **Thomas Marley**. *The Gorenstein property for coherent rings.*

Answering a question posed by Glaz, Hamilton and Marley used Čech cohomology to introduce a theory of non-Noetherian Cohen-Macaulay rings for which coherent regular rings are Cohen-Macaulay. A natural question to ask is whether there is a theory of Gorenstein rings that not only agrees with the Noetherian case, but for which coherent regular rings are Gorenstein, and coherent Gorenstein implies Cohen Macaulay. Using the notion of Gorenstein dimension (introduced by Auslander and Bridger), and a generalized form of the Auslander-Bridger formula for coherent rings, we present a theory of non-Noetherian Gorenstein rings satisfying these criterion. (Received September 15, 2008)