Meeting: 998, Houston, Texas, SS 21A, Special Session on Homological Algebra of Commutative Rings

998-13-211 Yuji Yoshino* (yoshino@math.okayama-u.ac.jp), Math. Dept., Faculty of Science, Okayama University, 700-8530 Okayama, Okayama, Japan. A functorial approach to modules of G-dimension zero. Preliminary report.

Let \mathcal{G} be the category of modules of G-dimension zero over a commutative Noetherian ring, and let $\underline{\mathcal{G}}$ be the associated stable category. We will show that the functor category mod $\underline{\mathcal{G}}$ is a Frobenius category. We will also discuss how this property could characterize the category \mathcal{G} .

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