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Jinjia Li* (jinjiali@mtsu.edu), Department of Mathematical Sciences, Middle Tennessee State University, MTSU box 34, Murfreesboro, TN 37132. *Some observations on rigidity of Frobenius endomorphism.*

Avramov and Miller proved that over complete intersections, the Frobenius endomorphism (regarded as a module) is always rigid. In general, this cannot be generalized to the Gorenstein case. Explicit examples of nonrigid Frobenius endomorphism will be constructed. On the other hand, it is not clear to which extent one can generalize Avramov and Miller's result. Some partial results in this regard will also be discussed. Part of this work is joint with Claudia Miller. (Received February 02, 2009)