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Jesse Burke* (s-jburke13@math.unl.edu), 203 Avery Hall, Lincoln, NE 68588. *Vanishing of self-extensions over a complete intersection.*

Let R be a local complete intersection ring and M a finite R -module. Avramov and Buchweitz showed that M has finite projective dimension if $\text{Ext}_R^{2n}(M, M) = 0$ for some $n \geq 1$. We generalize this result by showing that finiteness is not necessary. The proof is new and in particular makes use of Bousfield localization. (Received September 01, 2009)