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Title: Codualizing Modules And Complexes

Abstract: Let  $R$  be a commutative, noetherian ring. A finitely generated  $R$ -module  $C$  is said to be semidualizing if  $\text{Ext}_R^i(C, C) = 0$  for all  $i > 0$  and  $R \xrightarrow{\cong} \text{Hom}_R(C, C)$ . When  $R$  is local, an artinian  $R$ -module  $T$  is said to be quasidualizing if  $\text{Ext}_R^i(T, T) = 0$  for all  $i > 0$  and  $\widehat{R} \xrightarrow{\cong} \text{Hom}_R(T, T)$ . Using the notion of  $I$ -cofiniteness, we introduce a unifying notion that recovers each of the above notions as special cases. This is joint work with Sean Sather-Wagstaff.