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**Douglas J Dailey** and **Thomas Marley\*** (tmarley1@unl.edu), Department of Mathematics, 203 Avery Hall, University of Nebraska-Lincoln, Lincoln, NE 68588. *A change of rings result for Matlis reflexivity.*

Let  $R$  be a commutative Noetherian ring and  $E$  the minimal injective cogenerator of the category of  $R$ -modules. An  $R$ -module  $M$  is (Matlis) reflexive if the natural evaluation map  $M \rightarrow \text{Hom}_R(\text{Hom}_R(M, E), E)$  is an isomorphism. We prove that if  $S$  is a multiplicatively closed subset of  $R$  and  $M$  is an  $R_S$ -module which is reflexive as an  $R$ -module, then  $M$  is a reflexive  $R_S$ -module. The converse holds when  $S$  is the complement of the union of finitely many nonminimal primes of  $R$ , but fails in general. (Received January 17, 2017)