

1089-16-40

**Ashish K Srivastava\*** (asrivas3@slu.edu), Department of Mathematics & CS, Saint Louis University, Saint Louis, MO 63103, and **Pedro A Guil Asensio**. *Automorphism-invariant modules and additive unit representations in endomorphism rings.*

A module is called automorphism-invariant if it is invariant under any automorphism of its injective hull. Dickson and Fuller have shown that if  $R$  is a finite-dimensional algebra over a field  $\mathbb{F}$  with more than two elements then an indecomposable automorphism-invariant right  $R$ -module must be quasi-injective. We extend and simplify the proof of this result by showing that any automorphism-invariant module over an algebra over a field with more than two elements is quasi-injective. Our proof is based on the study of the additive unit structure of endomorphism rings. (Received January 16, 2013)