

SUMS OF AUTOMORPHISMS OF FREE ABELIAN GROUPS AND MODULES

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ABSTRACT

We consider endomorphisms of M , a free \mathbf{R} -module of arbitrary rank, where \mathbf{R} is an associative unital ring with the property that every element of \mathbf{R} is a sum of two units of \mathbf{R} . We prove that every endomorphism of M is a sum of two automorphisms of M .