# SOME EXAMPLES OF BANDS WITH TWO COMPONENTS 

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Abstract
A band is a semigroup whose elements are idempotents. The paper is motivated by some open problems concerning linear representations of bands. A counterexample to a conjecture stated in [1] is given. On the other hand, it is proved that there exist linear bands with two components such that the associated commutative $K$-algebra constructed in [1] cannot be embedded into any Noetherian ring, even in the case where this algebra is reduced.

