

ASSOCIATE INVERSE SUBSEMIGROUPS OF REGULAR SEMIGROUPS

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ABSTRACT. By an *associate inverse subsemigroup* of a regular semigroup we mean a subsemigroup T of S containing a least associate of each $x \in S$, in relation to the natural partial order \leq_S in S . We describe the structure of a regular semigroup with an associate inverse subsemigroup, satisfying two natural conditions. As a particular application, we obtain the structure of regular semigroups with an associate subgroup with medial identity element.

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