

2012 Minho Meeting on Semigroups - 4th June 2012

***E*-special ordered regular semigroups**

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A semigroup S with non-empty set E of idempotents is said to be *E-inversive* if, for every $x \in S$, the set $I(x) = \{a \in S \mid xa, ax \in E\}$ is not empty. Clearly, every regular semigroup is *E-inversive*. In the theory of ordered semigroups a significant role is played by elements that are the biggest with respect to some particular property. Here we consider ordered *E-inversive* semigroups S in which, for every $x \in S$, the set $I(x)$ has a biggest element x^+ . Such semigroups are said to be *E-special*. We investigate those *E-special* ordered regular semigroups in which the unary operation $x \mapsto x^+$ is antitone, important examples of which are all regular strong Dubreil-Jacotin semigroups and the crown bootlace semigroup.