Liang, Xingliang; Zhao, Xianzhong; Ren, Miaomiao
Characterization of semigroups with local units by regular acts. (Chinese. English summary)
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Summary: In this paper, homological classification of semigroups with local units is studied by using regular S-acts in the category of unitary S-acts. By investigating the properties of the elements of regular S-act, the relationship between regularity and coproducts (Rees exact sequence) is established. By exploring the relationship between regular S-acts and principally weakly flat S-acts (projective S-acts), semigroups with local units are characterized.

MSC:
20M50 Connections of semigroups with homological algebra and category theory
20M17 Regular semigroups

Keywords:
semigroups with local units; S-acts; regularity; homological classification

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