

Groups and Semigroups

Equidivisibility and profinite coproduct

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Equidivisible semigroups are a natural common generalization of free semigroups and groups. Since some years ago, the property of being equidivisible got renewed attention as a useful tool in the study of relatively free profinite semigroups.

The class of equidivisible semigroups is closed under taking free products, that is, coproducts in the category of semigroups. Here we present an analog of this fact for the category of profinite semigroups. This provides new examples of profinite equidivisible semigroups.