

Session: Conjugation in Semigroups

Natural conjugation and partial inner automorphisms

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Konieczny's notion of natural conjugation has turned out to be a very interesting generalization of group conjugacy to arbitrary semigroups. In groups, conjugacy classes are precisely orbits of the inner automorphism group. For most of the known generalizations of conjugation to semigroups, no analogous statement can be made. Natural conjugation, however, leads naturally (pun intended) to the notion of partial inner automorphism. In this talk, I will discuss the partial inner automorphism inverse monoid of an arbitrary semigroup and how it is connected to natural conjugation.