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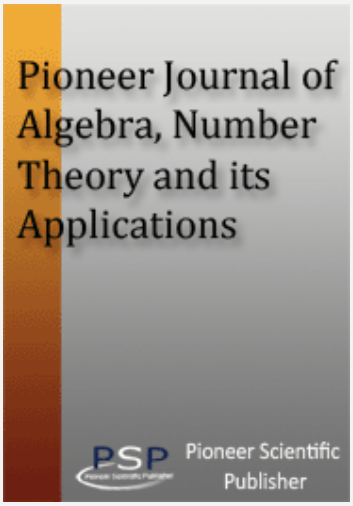

ON THE INVARIANCE PROPERTY FOR ST-FLOWS IN THE SHAPE THEORY OF TOPOLOGICAL SEMIGROUPS

Abdulkafi A. Al-Rafaei and Amin Saif

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Abstract

The main objective of this paper is to extend *S*-invariance property for *S*-flow in the shape theory for topological spaces to their analogical structures in the shape theory for topological semigroups. This extension involves some concepts and results such as *ST*-flow, *ST*-invariance property and giving an equivalence relation on a topological semigroups which correspond, under the action of a topological monoids, to the *ST*-invariant control sets for control systems. For this relation, we prove that there are unique relative *ST*-invariant classes.

Keywords and phrases: topological semigroup, *S*-flow.