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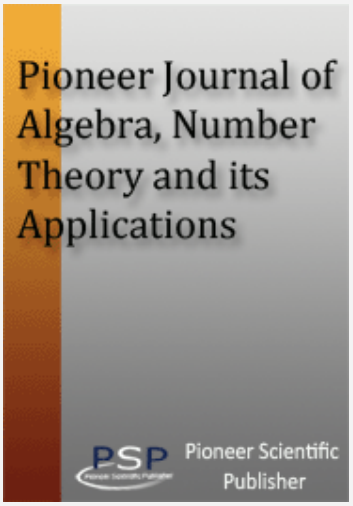

PROPERTY VARIETY OF GROUPS, (U)

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Abstract

The class of algebras which are defined by (hyper) identities is called a (hyper) variety. For example, semigroups, quasigroups, groups, rings, lattices, Boolean algebras are varieties. But the class of fields is not a variety (followed from the classical Birkhoff theorem on varieties). Below we give an example of a hypervariety also. In this paper, we study that for any $n \geq 1003$, there exist continuum non isomorphic simple groups with property (U), whose U-constant satisfies the inequality $u(G) < 2n4$. The question of finding infinite groups with property (U) was proposed in the joint work by D. Osin and D. Sonkin. It is not hard to show that if the group has property (U) with respect to some S, then it has property (U) relatively to any finite generating set. It is obvious that finite groups have property (U).

Keywords and phrases: periodical groups, simple groups, abuot groups, (U) property, Adian-Lysenok groups.