GEOMETRIC SCALES FOR VARIETIES OF ALGEBRAS AND QUASI-IDENTITIES

A. G. Pinus

We introduce a preorder for universal algebras with respect to their geometries. This naturally leads to the notion of the geometric scale for a variety of algebras. We investigate connections between the introduced relation and infinite quasi-identities that hold in algebras, as well as other properties of the relation and the scale.

Key words and phrases: universal algebra, algebraic set, geometrically equivalent algebras, quasi-identities.

Pinus Aleksandr Georgievich
Novosibirsk State
Technical University,
Novosibirsk, 630092 Russia.
E-mail: algebra@nstu.ru, ag.pinus@gmail.com