

IBN-varieties of algebras.

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One of the important question of the universal algebraic geometry is a question about difference between geometric and automorphic equivalence of algebras of the some variety Θ . If the variety Θ is an IBN-variety (has an IBN propriety) then the studying of this question is easier.

Will be presented the very simple proof of the very strong

Theorem 1 *If Δ is an IBN-variety of algebras then every it supvariety $\Theta \supset \Delta$ is also an IBN-variety.*

We will consider many varieties of one-sorted and many-sorted algebras, which appears in the algebraic studies by very natural way, for example: semi-groups, representations of Lie algebras, representations of groups, automaton. By using of this Theorem we will prove that these varieties have an IBN-propriety.