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Abstracts of Short Communications and Posters

Section:

2. Algebra

1991 MS Classification: 17

Zubrilin, Konstantin, Moscow State University, Russian Federation:

The structure theory of algebras that satisfy Capelli identities.

We say that an algebra satisfies the *system of Capelli identities of order* n if any polynomial that is multilinear and skew-symmetric in some n variables is an identity of this algebra. Capelli identities can be defined for an arbitrary signature, but originally were introduced only for associative algebras by Yu. P. Razmyslov. The structure theory of finitely generated algebras of an arbitrary finite signature over a commutative and associative Noetherian ring satisfying the Capelli identities of some order is constructed.

Reference: K. A. Zubrilin, On the largest nilpotent ideal in algebras satisfying Capelli identities, Sbornik Math. 188:8, 1203-1211