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Fermionic Novikov algebras admitting invariant non-degenerate symmetric bilinear forms.

(English) [Zbl 07285972](#)

Czech. Math. J. 70, No. 4, 953-958 (2020)

Summary: Novikov algebras were introduced in connection with the Poisson brackets of hydrodynamic type and Hamiltonian operators in the formal variational calculus. Fermionic Novikov algebras correspond to a certain Hamiltonian superoperator in a supervariable. In this paper, we show that fermionic Novikov algebras equipped with invariant non-degenerate symmetric bilinear forms are Novikov algebras.

MSC:

17B60 Lie (super)algebras associated with other structures (associative, Jordan, etc.)

17A30 Nonassociative algebras satisfying other identities

17D25 Lie-admissible algebras

Keywords:

Novikov algebra; fermionic Novikov algebra; invariant bilinear form

Full Text: [DOI](#)

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