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Abstracts of Short Communications and Posters

Section:

2. Algebra

1991 MS Classification: 17,18, 55
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Cohomologies of right-symmetric algebras and Novikov algebras
Right-symmetric identity is $(a \circ b) \circ c - a \circ (b \circ c) = (a \circ c) \circ b - a \circ (c \circ b)$. Left-commutative identity is $a \circ (b \circ c) = b \circ (a \circ c)$. Right-symmetric left commutative algebra is called Novikov. We develop cohomology theories for right-symmetric algebras, left-commutative algebras and, in particularly for Novikov algebras. We prove that they have pre-simplicial structures. We use our theory for constructing right-symmetric (Novikov) deformations and central extensions for matrix algebras and vector fields Lie algebras. We give also constructions Leibniz algebras by Novikov algebras.