

DOUBLE EXTENSIONS OF LIE SUPERALGEBRAS IN CHARACTERISTIC 2

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A Lie algebra with a non-degenerate invariant symmetric bilinear form will be called a nis-Lie algebra. The double extension of a Lie (super)algebra with a homogenous non-degenerate symmetric invariant bilinear form is the result of simultaneously adding to it a central element and an outer derivation so that the larger algebra is also nis.

We consider double extensions of Lie superalgebras in characteristic 2, and concentrate on peculiarities of these notions related with the possibility for the bilinear form and the derivation to be odd. Two Lie superalgebras have been discovered by this method indigenous to the characteristic 2 case.

This is a joint work with Said Benayadi.