A formula for Casimir's ghosts

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Abstract

A Casimir's ghost is an invariant for a certain twisted adjoint action of a Lie superalgebra into its enveloping algebra. It was introduced in the 90's by physicists. In 2000, the mathematician Gorelik showed its existence for every unimodular Lie superalgebra. Later she also showed that it is interesting when studying representation theory of Lie superalgebras.