

Superorbits

Interviene

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Abstract

The orbit method associates linear representations to coadjoint orbits of Lie groups. In order to extend this method to the case of Lie supergroups (or graded Lie groups) one has to solve the longstanding problem of defining what is the orbit passing through an odd functional.

Generalizing the idea of "orbits through parametrized points", known in the theory of algebraic schemes, we discuss criteria for the existence of such orbits as supermanifolds and show that these are satisfied in the above case of "odd points" in the dual of a Lie superalgebra. We define a supersymplectic form on such orbits and explain how to quantize them. This yields new linear representations of Lie supergroups, as we show in the example of (super) Heisenberg groups.

Seminario

Martedì 17 febbraio 2015

Aula 7, ore 10.30

Via Musei, 41 - Brescia



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