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Supersymmetries and constants of motion in spinning spaces

M. Visinescu*

Department of Theoretical Physics
National Institute for Physics and Nuclear Engineering
Magurele, P. O. Box MG-6, Bucharest, Romania

ABSTRACT

The geodesic motion of pseudo-classical spinning particles in curved spaces is analzyed. Investigating the generaliyed Killing equations for spinning spaces, we express the constants of motion in terms of Killing-Yano tensors. The general results are applied to the case of the four-dimensional Euclidean Taub-NUT spinning space. Some previous results from the literature are corrected.

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