MR2271824 (2007g:70035) 70H03 70G45 70H50

Matsyuk, Roman (UKR-AOS-A2)

Canonical formalism for quasi-classical particle "Zitterbewegung" in Ostrohrads′kyj mechanics. (English summary)

Differential geometry and its applications, 629–637, *Matfyzpress, Prague,* 2005.

Summary: "The homogeneous canonical formalism of Rund is applied to the second-order Lagrangian model of the self-interacting particle of Bopp. The quasi-classical free spinning particle of Mathisson appears then as a constrained subsystem of the previous. Differential-geometrical mechanisms offered are formulated in a fairly general manner, although revealed here in a particular example of physical meaning."

{For the entire collection see MR2268911 (2007f:53002)}

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