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Matsyuk, R. Ya. (2-AOSUK-A2)

Lagrangian analysis of invariant third-order equations of motion in relativistic classical particle mechanics. (Russian)

Dokl. Akad. Nauk SSSR **285** (1985), no. 2, 327–330.

The problem of existence of the invariant third-order Euler-Poisson equation and the respective Lagrangian is examined for a pseudo-Euclidean space, especially for three- and four-dimensional spaces, and for some relativistic equations of motion.

{English translation: Soviet Phys. Dokl. **30** (1985), no. 11, 923–925.} [Z. Janković](#)

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