MR700801 (84g:83003)   83A05 49H05

Matsyuk, R. Ya.

Variational principle for uniformly accelerated motion. (Russian)

Mat. Metody i Fiz.-Mekh. Polya No. 16 (1982), 84–88.

The third-order differential equation for the uniformly accelerated motion of a particle in special relativity (restricted to two dimensions) is studied. The author discusses the connection of this equation with the geodesic circles of concircular geometry. He finds the corresponding Lagrangian of second degree (satisfying also some symmetry requirement).

{Reviewer's remark: The comparison of the author's results with other methods of solution of the inverse variational problem and a discussion of the physical meaning of his Lagrangian would be desirable and interesting.}   *Jan Novotný*