



AN EXPLICIT FORM OF LAGRANGIAN CONNECTION

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Abstract

In this paper, we use the notion of Grifone's connection over a tangent bundle. We have characterized the solutions of holonomic Lagrangian mechanics and show that the geodesics of the Lagrangian connection constructed on the tangent bundle of finslar or Riemannian manifold are the solutions of the holonomic Euler-Lagrange system. We prove in this paper the explicit form of all Lagrangian connection on the tangent bundle such that their sprays are same S .

Keywords and phrases: connections, Lagrangian mechanics, fibre bundle, spray.

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