Lie-Form Invariance of a Type of Non-holonomic Singular Systems

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Abstract: In this paper, the Lie-form invariance of a type of non-holonomic singular systems is studied. The differential equations of motion of the systems are given. The definition and the criterions of the Lie-form invariance for the systems are presented. The Hojman conserved quantity and the Mei conserved quantity are obtained. An example is given to illustrate the application of the results.

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