

Lie Symmetry and Conserved Quantities for Nonholonomic Vacco Dynamical Systems

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Abstract: In this paper the Lie symmetry and conserved quantities for nonholonomic Vacco dynamical systems are studied. The determining equation of the Lie symmetry for the system is given. The general Hojman conserved quantity and the Lutzky conserved quantity deduced from the symmetry are obtained.

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Key words: Vacco dynamical system, Lie symmetry, general Hojman conserved quantity, Lutzky conserved quantity

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