Perturbation and Adiabatic Invariants of Mei Symmetry for Nonholonomic Mechanical Systems

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Abstract: Based on the concept of adiabatic invariant, the perturbation and adiabatic invariants of the Mei symmetry for nonholonomic mechanical systems are studied. The exact invariants of the Mei symmetry for the system without perturbation are given. The perturbation to the Mei symmetry is discussed and the adiabatic invariants of the Mei symmetry for the perturbed system are obtained.

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