

CHAPTER OVERVIEW

2: Lagrangian Analytical Mechanics

The goal of this chapter is to describe the Lagrangian formalism of analytical mechanics, which is extremely useful for obtaining the differential equations of motion (and sometimes their first integrals) not only for mechanical systems with holonomic constraints but also some other dynamic systems.

[2.1: Lagrange Equation](#)

[2.2: Three Simple Examples](#)

[2.3: Hamiltonian Function and Energy](#)

[2.4: Other Conservation Laws](#)

[2.5: Exercise Problems](#)

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