

Quick Cheat Sheet

(for fundamentals of physics)

ReEFT

May 1, 2024

Mechanics

Electrodynamics

Quantum Mechanics

Statistical Mechanics

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Part I

Mechanics

Chapter 1

Hamilton's Principle

Define the *action* of a system of particles as:

$$S = \int_{t_1}^{t_2} L(q, \dot{q}, t) dt \quad (1.1)$$

Chapter 2

Lagrange's Formulation

Chapter 3

Hamilton's Formulation

Part II

Electrodynamics

Part III

Quantum Mechanics

Chapter 4

Formalism

Part IV

Statistical Mechanics