

Chapter 0

Reference Materials

Here I list several resources, arranged by topic. My personal favorites are marked with a diamond (\diamond).

0.1 Lagrangian Mechanics (mostly)

- \diamond L. D. Landau and E. M. Lifshitz, *Mechanics*, 3rd ed. (Butterworth-Heinemann, 1976)
- \diamond A. L. Fetter and J. D. Walecka, *Nonlinear Mechanics* (Dover, 2006)
- O. D. Johns, *Analytical Mechanics for Relativity and Quantum Mechanics* (Oxford, 2005)
- D. T. Greenwood, *Classical Mechanics* (Dover, 1997)
- H. Goldstein, C. P. Poole, and J. L. Safko, *Classical Mechanics*, 3rd ed. (Addison-Wesley, 2001)
- V. Barger and M. Olsson, *Classical Mechanics : A Modern Perspective* (McGraw-Hill, 1994)

0.2 Hamiltonian Mechanics (mostly)

- \diamond J. V. José and E. J. Saletan, *Mathematical Methods of Classical Mechanics* (Springer, 1997)

- ◊ W. Dittrich and M. Reuter, *Classical and Quantum Dynamics* (Springer, 2001)
- V. I. Arnold *Introduction to Dynamics* (Cambridge, 1982)
- V. I. Arnold, V. V. Kozlov, and A. I. Neishtadt, *Mathematical Aspects of Classical and Celestial Mechanics* (Springer, 2006)
- I. Percival and D. Richards, *Introduction to Dynamics* (Cambridge, 1982)

0.3 Mathematics

- ◊ I. M. Gelfand and S. V. Fomin, *Calculus of Variations* (Dover, 1991))
- ◊ V. I. Arnold, *Ordinary Differential Equations* (MIT Press, 1973)
- V. I. Arnold, *Geometrical Methods in the Theory of Ordinary Differential Equations* (Springer, 1988)
- R. Weinstock, *Calculus of Variations* (Dover, 1974))