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READING LIST

Textbooks:

"Classical Mechanics," John R. Taylor, University Science Books, 2005. Clearest explanations.

"Mathematical Methods for Scientists and Engineers," Donald A. McQuarrie, University Science Books, 2003.

The classics:

Classical dynamics

"Classical Mechanics," 3rd edition, H. Goldstein, C. Poole, J. Safko; Addison Wesley, San Francisco, 2002. Older editions are just as good; the 2nd edition may even be better.

"Mechanics," L. D. Landau and E. M. Lifshitz; Pergamon, Addison-Wesley, Reading, MA, 1960. Short but sweet.

Mathematics

"Methods of Theoretical Physics," P. M. Morse and H. Feshbach; McGraw-Hill, New York, 1953. (two volumes) (not as broad coverage as the other books)

"Mathematical Methods for Physicists," 7th edition, G. B. Arfken and H. J. Weber; Elsevier, Amsterdam and Boston, 2012.

Recommended textbooks for supplemental reading:

Classical dynamics

"Classical Mechanics," 5th edition, T. W. B. Kibble and F. H. Berkshire; Imperial College Press, London, 2004, available in paperback.

"Classical Mechanics," H. C. Corben and P. Stehle; Robert E. Krieger Publishing Co., Huntington, NY, 1960.

"Classical Mechanics: Systems of Particles and Hamiltonian Dynamics," 2nd ed., W. Greiner, Springer, 2010.

"Classical Dynamics of Particles and Systems,: 5th ed., S. T. Thornton and J. B. Marion; Brooks/Cole, Boston, 2008.

"Classical Mechanics," J. W. Leech; Methuen & Co. and Science Paperbacks, London, 1965.

"Elements of Hamiltonian Mechanics," 2nd ed., D. ter Haar, 1961.

Mathematics

"Mathematical Methods for Scientists and Engineers," Donald A. McQuarrie, University Science Books, 2003.

"Foundations of Applied Mathematics," Michael D. Greenberg , Dover Publications, Mineola, New York, 2013.

"Mathematical Methods in the Physical Sciences," 3rd ed., Mary L. Boas (John Wiley, New York, 2006.

"Mathematical Methods for Physics and Engineering," 3rd ed., K. F. Riley, M. P. Hobson, S. J. Bence, Cambridge University Press, 2006.