

TEXTS

Required: R. M. Kulsrud, *PLASMA PHYSICS FOR ASTROPHYSICS*

Recommended: E.M. Lifshitz and L.P. Pitaevskii, *Physical Kinetics*

REFERENCES and SUPPLEMENTARY MATERIAL

- a.) General Plasma Physics
 - i.) Peter Sturrock, *PLASMA PHYSICS*
 - ii.) W. B. Thompson, *AN INTRODUCTION TO PLASMA PHYSICS*
 - iii.) N. Krall and A. Trivelpiece, *PRINCIPLES OF PLASMA PHYSICS*
 - iv.) R. Goldston and P.H. Rutherford, *BASIC PLASMA PHYSICS*
 - v.) P. Bellan, *FUNDAMENTALS OF PLASMA PHYSICS*

- b.) Kinetic Theory
 - i.) D.R. Nicholson, *INTRODUCTION TO PLASMA THEORY*
 - ii.) D. Montgomery and D. Tidman, *PLASMA KINETIC THEORY*
 - iii.) Y.L. Klimontovich, *THE STATISTICAL THEORY OF NON-EQUILIBRIUM PROCESSES IN A PLASMA*
 - iv.) R. Zwanzig, *NON-EQUILIBRIUM STATISTICAL MECHANICS*
 - v.) C.W. Gardiner, *HANDBOOK OF STOCHASTIC METHODS*

- c.) Plasma and Fluid Collective Dynamics
 - i.) T.H. Stix, *THEORY OF PLASMA WAVES*
 - ii.) Landau and Lifshitz, *FLUID MECHANICS*
 - iii.) Landau and Lifshitz, *ELECTRODYNAMICS OF CONTINUOUS MEDIA*
 - iv.) James Lighthill, *WAVES IN FLUIDS*
 - v.) G.B. Whitham, *LINEAR AND NONLINEAR WAVES*

- d.) Nonlinear Plasma Theory; Nonlinear Dynamics
 - i.) R. Sagdeev and A. Galeev, *NONLINEAR PLASMA THEORY*
 - ii.) A. Craik, *WAVE INTERACTIONS AND FLUID FLOWS*
 - iii.) E. Ott, *CHAOS IN DYNAMICAL SYSTEMS*
 - iv.) P.H. Diamond, et al., *MODERN PLASMA PHYSICS: VOLUME 1, PHYSICAL KINETICS OF TURBULENT PLASMAS*
 - v.) B.B. Kadomtsev, *PLASMA TURBULENCE*

- e.) ICF and Laser-Plasma Interaction
 - i.) J. Lindl, *INERTIAL CONFINEMENT FUSION*
 - ii.) W. Kruer, *LASER-PLASMA INTERACTION*
 - iii.) Y.R. Shen, *PRINCIPLES OF NONLINEAR OPTICS*