

CHAPTER 21 and Second half of CHAPTER 20

Reading: Sections 20.4–20.7 of Chapter 20, *Waves in Cold Plasmas: Two Fluid formalism* [focus especially on Section 20.7, the Two Stream Instability]. Also all of Chapter 21, *Kinetic Theory of Warm Plasmas*

Problems

- A. Exercise 21.1, Two-fluid Equation of Motion
- B. DO one of:
 - Exercise 21.3, Dielectric Tensor for Longitudinal, Electrostatic Waves OR
 - Exercise 21.10 Correlations in a Tokamak Plasma
- C. Exercise 21.4, Landau Contour Deduced Using Laplace Transforms
- D. Do one of:
 - Exercise 21.5, Ion Acoustic Dispersion Relation, OR
 - Exercise 21.6, Dispersion Relations for a Non-Maxwellian Distribution Function