

CHAPTER 20

Reading: Chapter 20, Waves in Cold Plasmas: Two-Fluid Formalism

Problems

- A. DO one of:
 - 1. Exercise 20.2 Effect of collisional damping; OR
 - 2. Exercise 20.3 Fluid drifts in a time-independent plasma
- B. DO one of:
 - 1. Exercise 20.4 Ion acoustic waves, OR
 - 2. Exercise 20.6 Dispersion and Faraday rotation of pulsar pulses
- C. DO one of:
 - 1. Exercise 20.5 Ion acoustic solitons; OR
 - 2. Exercise 20.8 Reflection of short waves by the ionosphere AND Exercise 20.10 Refractive index surface
- D. DO Exercise 20.9 Exploration of modes in CMA diagram – do any two of the three parts.