Physics 136c, Week 3: Kinetic Theory for Warm Plasma
(Dated: April 18, 2012; due April 25, 2012)

The maximum number of points you can get for this assignment is **50**, although you could choose to do problems that worth more than 50 points.

This week we covered Chapter 21 of Blandford and Thorne (BT).

1. **Dielectric Tensor and Dispersion Relation for Longitudinal Electrostatic waves.** Exercise 21.3 of BT. [15 Points]

2. **Laplace Transforms.** Exercise 21.4 [20 Points]

3. **Non-Maxwellian Distribution Function** Exercise 21.6 [15 Points]

4. **Range of Unstable Wave Numbers** Exercise 21.8 [15 Points]

5. **BBGKY Hierarchy** Exercise 21.10 [20 Points]