UNIVERSITY OF MARYLAND

DEPARTMENT OF PHYSICS

COLLEGE PARK, MARYLAND 20742

PHYSICS 732 DR. H. D. DREW **HOMEWORK ASSIGNMENT #5** Due Tuesday, April 25, 2007

Read Ashcroft and Mermin, chapter 31, 32, 33 Read Marder, chapter 24, 25, 26

Problems

- 1. Ashcroft and Mermin, chapter 31, #3, 9.
- 2. Ashcroft and Mermin, chapter 32, #2.
- 3. Ashcroft and Mermin, chapter 33, #3, 6, 9
- 4. Generalize the arguments given in class for the range of validity of the Landau theory and show that the Landau theory would be valid at the critical point if the world had more than four dimensions.