Phys 119A

**Due:** Friday, Nov. 12 at the beginning of class.

**READING:** SCHROEDER: CHAPTER 3.1 – 3.4, CARTER: CHAPTER 7

## **BOOK PROBLEMS:**

SCHROEDER: 3.5(see below), 3.8, 3.9, 3.10, 3.14, 3.25 (parts a-e only)

CARTER: 7-4, 7-8, 7-11, 7-13, 7-15

Note that Schroeder problem 3.5 requires the answer to problem 2.17. That answer is:  $\Omega_{Einstein}(N,q) = \left(\frac{Ne}{q}\right)^{q}$ . This result is valid when both N and q are very large, but q<<N.