

Reading Assignment 11/3

(due: Monday, November 3, 9 am)

Read: §6.3**1.:** Which assumptions are necessary for the equipartition theorem to be applicable?**2. Comments:** What of this reading did you find most difficult and what did you find most interesting? Any other comments?**Homework due Nov. 3:****1.** problem 6.17**2.** problem 6.19**3.** In problem 6.18 we derived

$$C = \left(\frac{\partial \overline{E}}{\partial T} \right)_{V,N} = \frac{1}{kT^2} \sigma_E^2 = \frac{1}{kT^2} (\overline{E^2} - (\overline{E})^2)$$

Derive a similar relation for $\chi = \frac{\partial \overline{\mu_z}}{\partial B}$ for the model of a two-state paramagnet.

(In case we did not get to problem 6.18 in class, then 6.18 will replace this problem.)