

Phys 404
Spring 2010
Homework 4, CHAPTER 4
Due Thursday, March 11, 2010 @ 12:30 PM

Chapter 4 assignment:

Read chapter 4, then do

1. K+K, Chapter 4, Problem 1
2. K+K, Chapter 4, Problem 2
3. K+K, Chapter 4, Problem 5
4. K+K, Chapter 4, Problem 7
5. K+K, Chapter 4, Problem 8
6. K+K, Chapter 4, Problem 11 (Calculate the high temperature limit of C_V only)
7. K+K, Chapter 4, Problem 12 (Hint: use Eqs. (25) and (26) to find U/V for photons, and from that the heat capacity per unit volume C_V/V)
8. K+K, Chapter 4, Problem 18