Phys 404
Spring 2010
Homework 10, CHAPTERS 10, 14
Due Thursday, May 6, 2010 @ 12:30 PM

The final exam is May 18, 1:30-3:30 PM, and will cover the entire course. A single 8-1/2" x 11" crib sheet is allowed. No books, electronics/screens, or calculators are allowed.

1. K+K, Chapter 10, Problem 1, Parts (a) and (b) only

2. K+K, Chapter 10, Problem 2

3. K+K, Chapter 10, Problem 3

4. K+K, Chapter 10, Problem 4 assume that each three-dimensional harmonic oscillator has allowed energies given by $(n_x+n_y+n_z)\hbar\omega-\varepsilon_o$, where n_x, n_y, and n_z are independent non-negative integers and $-\varepsilon_o$ is the ground state energy.

For part (b) you must actually solve for the latent heat per atom.

5. K+K, Chapter 14, Problem 1