

Physics 14 Thermal Physics Spring 2005

Assignment #2 - Due Tuesday 2/01/05

Problem sessions : Sunday afternoon at 3:00PM in Science Center 113

Lecture Notes : Boccio --- pages 45-84

Textbook readings : Schroeder - chapter 1 pages 33-48
Schroeder - chapter 2 pages 49-74

Textbook problems :

- 1.54 - climb the mountain
- 1.57 - R values
- 1.69 - Fick's second law
- 2.02 - flipping 20 coins
- 2.04 - five-card poker hands
- 2.08 - two Einstein solids
- 2.11 - two interacting two-state paramagnets
- 2.18 - Stirling's formula; multiplicity of Einstein solid
- 2.19 - Stirling's formula; multiplicity of two-state paramagnet
- 2.22 - peak of multiplicity function; two Einstein solids
- 2.23 - two-state paramagnet with 10^{23} elementary dipoles
- 2.26 - multiplicity of ideal monatomic gas in "flatland"
- 2.27 - two-sided box