

CHAPTER 4: STATISTICAL THERMODYNAMICS**Reading:**

Chapter 4 of Blandford and Thorne.

Problems

- A. Exercise 4.1: Pressure-Measuring Device
- B. Do Exercise 4.3: Enthalpy Representation for Thermodynamics; if you find it overly difficult, and you are rusty on thermodynamics, instead do Exercise 4.2 on the Energy Representation for a Nonrelativistic Monatomic Gas.
- C. Do either exercise 3.4 on Latent Heat and Clausius Clapeyron Equation, or exercise 4.5 on Electron Positron Equilibrium at Low Temperatures.
- D. Do either Exercise 4.7 on Fluctuations and Phase Transitions in a Van der Waals Gas (don't hesitate to use Mathematica or Maple if appropriate), or Exercise 4.8 on Fluctuations of Systems in Contact with a Heat Bath.