**Problem set 1**

Solve two problems with written solutions to be handed in by October 9.

Those students who have already taken one course on Statistical Physics can swap the solution of one the problems by mentoring one or two students who have not taken any course on Statistical Physics before.

The grade will take into account the written solutions as well as any discussion of these on the week after they were handed in. Successful mentoring will be graded with top marks (18-20).

Problems:

1. Regimes of Particulate and Wave-like Behavior: Exercise 3.3 of BT.
2. Observations of Cosmic Microwave Radiation from Earth: Exercise 3.7 of BT.
3. Equation of State for Relativistic, Electron-Degenerate Hydrogen: Exercise 3.10 of BT