Department of Physics, University of Maryland, College Park, MD 20742-4111

Physics 404 HOMEWORK ASSIGNMENT #1 Spring 2009

Due date: Thursday, Feb. 5 **Deadline:** Tuesday, Feb. 10

B means a problem in Blundell & Blundell's text; GT means a problem in Gould & Tobochnik.

Problems 1 and 3 are *not* assigned this year, but their solutions will be posted. Obviously, you cannot turn in problem 0.

0. Correct the typos in your copy of Blundell & Blundell as listed on their website and, additionally, on ours. See the links in the first sentence of "Text" on the class syllabus webpage: http://www.physics.umd.edu/courses/Phys404/einstein/Spring09/syllabus.html

(There was a version posted a couple days ago with errors on p. 339ff, preceded by **; those "corrections" are incorrect. A version was posted on Jan. 29 removing that item and adding some more corrections.)

- 1. B 1.2
- 2. B 1.4
- 3. B 1.5
- 4. B 2.3
- 5. B 2.5
- 6. B 3.3
- 7. B 3.4

8. GT 1.1, parts a-d, using

http://stp.clarku.edu/simulations/approachtoequilibrium/md3/index.html

In part d, ignore the instruction to create a video download!

The two-particle simulation is alleged to be at

http://stp.clarku.edu/simulations/approachtoequilibrium/md2/index.html

but this again gives 3 partitions, so skip part e! (ADDED on Feb. 6)