Due Friday January 18, 12:50 pm.

**Reading:** Sections 13.1 - 13.6 from Chapter 13.

**Problem 1.** Atwood machine with a heavy pulley. Problem 13.3* from the textbook.

**Problem 2.** Bead on a helix. Problem 13.5** from the textbook.

**Problem 3.** Natural coordinates. Problem 13.11* from the textbook.¹

**Problem 4.** Point mass on a cone. Problem 13.14** from the textbook.

**Problem 5.** Two masses on a spring. Problem 13.21** from the textbook.

**Problem 6.** Modified Atwood machine. Problem 13.23*** from the textbook.

¹See also Problem 13.4.