Problem Set 8 due Wednesday, November 29 at 5 PM

- 1. Problem 3.35
- 2. Problem 3:40

You may not discuss with other people problem 3. You can consult the textbook and solutions of previous homeworks.

3. Two masses *m* are suspended by springs *k* from a massless beam of length 2*l* that can rotate freely around its center. Consider small tilt oscillations of the beam and vertical oscillations of the masses. Find the oscillation frequencies of the normal modes. What is the meaning of a zero oscillation frequency?

