# Physics, Preparation for Tuesday, Nov. 14

### Read N4 from Six Ideas

## Office Hours

10am on Monday and Thursday till whenever people leave. If nobody shows up in the first half hour, I will likely go off and do other things. So come by between 10:00 and 10:30 and stay as long as you like. Knock loudly just in case I am in the kitchen instead of my office. Also, I remain available at most other times!

# **Presentations/Demonstrations**

#### **Angular Momentum Presentations/Demonstrations**

- 1. We will get out the gyroscope again
- 2. Emma
  - a. Real inertial navigation systems in airplanes, including pitch, yaw, and roll
  - b. What does roll due to the front wheel of a bicycle?

### N3 Presentations (some carried forward from Nov. 7)

- 3. Rebecca & Jack, N3R.2, p. 52, a graphical solution and an algebraic solution are both possible
- 4. Brian (maybe we only have time for one of these two):
  - a. Theory Presentation, Derivation of the Fundamental Theorem of Calculus
  - b. Theory Presentation, Uniform Circular Motion, including application to solar system orbits

#### **N5 Presentation**

5. Trey, N5M.12, p. 83, the drag coefficient

#### N6 Presentation

6. Will & Hexi, N6B.7, Lotsa practice making free body diagrams