

**Phys 410**

**Fall 2013**

**Homework #2**

**Due Thursday, 19 September, 2013**

All problems are from Taylor, *Classical Mechanics*.

- 1) Problem 2.52 Circular motion
- 2) Problem 2.53 Charge in an electric and magnetic field
- 3) Problem 3.2 Conservation of linear momentum
- 4) Problem 3.8 Hovering
- 5) Problem 3.12 Multistage rockets
- 6) Problem 3.15 Center of mass
- 7) Problem 3.25 Angular momentum
- 8) Problem 3.30 Moment of inertia
- 9) Problem 3.35 A disk rolling down an inclined plane

Extra Credit

- 1) Problem 2.55 The charged particle velocity selector