

**Due:** Friday, 11/14, 2:10pm, PHYS360 Assignment 11  
Note: this assignment is reduced in length

**Reading:**

1. Griffiths, Ch.3, pg. 160-190. Prepare for Reading Quiz: Friday 11/14, questions on anything in Griffiths, pages 160- 190, but especially:
  - a) understand eigenvalue equations for  $L^2$  and  $L_z$ , 165
  - b) understand eigenvalue equations for spin, pg 171
  - c) know the raising and lowering operators for angular momentum and spin
  - d) know spin  $\frac{1}{2}$  “mechanics,” pg 173-176
  - e) be able to describe interaction of spin with magnetic field, pg 178-182
  - f) be able to describe Larmor precession
  - g) be able to describe the Stern-Gerlach experiment.

**Problems:**

- Problem 4.24, pg 170
- Problem 4.27, pg 177
- Problem 4.29, pg 177
- Problem 4.34, pg 189
- Problem 4.55, pg 196