Physics 221B
Spring 2016
Homework 2
Due Friday, February 5, 2016 at 5pm

Reading Assignment: For rotations of spin 1/2 system, please read Notes 12, Secs. 1-9 and 13-14. If you need to review the derivation of angular momentum algebra, read Notes 13, Secs. 1-4; in any case, read Secs. 5-7. For the generalized adjoint formula, read Notes 13, Sec. 9; for spins in magnetic fields, read Notes 14, Secs. 3-5 and 10-11; for some useful identities involving spherical harmonics, read Notes 15, Secs. 7 and 8; for review of central force motion, read Notes 16, Secs. 1-4. Please also see the link to the table of Clebsch-Gordan coefficients, spherical harmonics and d-functions (reduced rotation matrices).

   Please do Problems 12.1, 13.2, 13.3, 15.1 and 15.2.