## HW #4 (129A), due Oct 25, 4pm

**1.** Calculate the magnetic moment of proton and neutron in the non-relativistic quark model and compare them to the data.

2. The resonance  $\rho^0$  decays into two pions. Explain why the final state can only be  $\pi^+\pi^-$  but not  $\pi^0\pi^0$ .