

Phys 4900, Fall 2011
Problem Set #2

1. *Griffiths EP, 1.7* Possible strong decays must conserve charge and (total) strangeness. But for only about 6 of these is the total mass of the products less than the mass of the decaying particle.
2. *Griffiths EP, 1.8* Consider the possible decays which conserve strangeness. Are they kinematically allowed?
3. *Griffiths EP, 2.1*
4. *Griffiths EP, 2.2*
6. *Griffiths EP, 2.6* Big hint: Recall that the electroweak theory has a vertex linking a Z and two W's and a vertex linking a photon and two W's.
5. *Griffiths EP, 2.7 a)– e)*