Phys 3810, Spring 2009
Problem Set #5

0. Turn this one in separately.

For a "spherical finite square well" of depth 60.0 MeV and radius 4.0 fm, find the energy eigenvalues of the bound states for all possible ℓ and plot the radial wave functions in some form (either $R_{n\ell}(r)$ or $r^2 R_{n\ell}(r)^2$).

1. *Griffiths*, **4.19**

2. *Griffiths*, **4.20**

3. *Griffiths*, **4.23**

4. *Griffiths*, **4.26**

5. *Griffiths*, **4.27**

6. *Griffiths*, **4.29**

7. *Griffiths*, **4.55**