

**Phys 3820, Fall 2012**  
**Problem Set #5**

1. For 5.0 MeV alpha particles incident on a gold nucleus (assume no recoil) make a plot of  $D(\theta)$  as given by Eq. (11.11)

Make sure your plot conveys *information*. If you need to plot  $\log_{10} D(\theta)$  to see something, then do so.

2. *Griffiths*, 11.3

3. *Griffiths*, 11.6

4. *Griffiths*, 11.9

5. *Griffiths*, 11.10

6. *Griffiths*, 11.19