## Homework 11

Due April 4th on paper at the beginning of class. Please let me know if you have a question or find a mistake. There are some hints on the second page.

Borthwick 10.5 and 10.6.

## Hints:

For 10.5, use the chain rule formula  $\partial_{x_j} = \frac{x_j}{r} \partial_r$ .

For 10.6, use the fact that if u is radial, then  $\Delta u = u'' + \frac{2}{r}u'$ .