## Physics 161, spring 2015

## HW # 4

## Due Thursday 12 February by 4 pm.

## I will be in my office on Tuesday afternoon.

There are only six problems in this set.

- **1.** P&M 2.34. Finding the extremum of a charge distribution
- **2.** P&M 2.50. Dividing the charge.
- **3.** P&M 2.58. Energy of a charged shell.
- **4.** P&M 3.9. Grounding a shell
- **5.** P&M **3**.13. Image charge for a grounded spherical shell. (Remember the law of cosines.)
- **6.** P&M **3**.59. A coaxial capacitor.