

## vPython Lab Questions Electric Field of a Proton – Physics 152

In the simulation you did in class you displayed the electric field at seven locations, all at a distance of  $3 \times 10^{-10}$ m. You will now change the locations of these seven electric field observations. In the simulation you turn in to the R drive you should calculate and display the electric field at the following points:

1. two distinct locations of your choice  $3 \times 10^{-10}$  from the proton
2. two distinct locations of your choice  $4 \times 10^{-10}$  from the proton
3. two distinct locations of your choice  $4.5 \times 10^{-10}$  from the proton
4. finally one location at  $3.5 \times 10^{-10}$  m and  $20^\circ$  above the  $z = 0$  plane.