Physics 217 Optional Problem Set Due: Friday, November 30, 2018

1. (40 points) Derive the form of the Laplacian in spherical polar coordinates starting from the Cartesian version. Make sure you show all the details and do not copy anything from a book.

As discussed in class, this problem set can take the place of another one for which a lower score was obtained. Final count for the course grade will include 12 from the 13 problem sets.