

## Homework #10 for Physics 371

Due 4pm Friday, April 22

1) Consider a particle of mass  $M$  moving in the central potential

$$V(r) = -\frac{Ze^2}{r} + \frac{C}{r^2}, \quad C > 0.$$

Determine the energy eigenvalues for this problem and their degeneracies.

2–5) Griffiths 4.9, 4.17, 4.45, and 4.46.