Assignment 8

Byungjoon Min, Quantum Mechanics II (due date: December 3, 2018)

All of these problems are not easy and quite technical. But, $\langle r^k \rangle$ for hydrogen is essential to understand spin-orbit coupling and find structure of hydrogen.

1 (not easy) Feynman-Hellmann Theorem [30 pt]

Griffiths 6.33

2 (difficult) Kramers' Relation [20 pt]

Griffiths 6.34

3 Kramers' Relation II [30 pt]

Griffiths 6.35