PHYS598 AQG, Fall 2017
Homework Set #4, due by 4:30 pm on Friday 10/20

Q1) [3 pts] Foot Exercise 7.5 – Saturation of absorption

Q2) [3 pts] Foot Exercise 7.6 – The properties of some transitions in hydrogen

Q3) [1 pts] Foot Exercise 7.9 – Doppler broadening

Q4) [2.5 pts] Foot Exercise 7.12 – The d.c. Stark effect

Q4-d) [0.5 pts] Related to Foot #7.12

For the same electric field strength as in Problem 7.12 (c), estimate (in first order perturbation theory) the percentage of excited state character mixed into the ground state.