Physics 653 Spring 2024

Worksheet #6

Monday, April 22, 2024

Name:

Questions (5 pts):

Consider the energy correction to the ground state hydrogen atom due to fine structure. (As you know, the fine structure is due to weakly relativistic electron motion, and it has three contributions to the energy.) Calculate how much each term contributes and sketch the energy diagram for the ground state when fine structure is taken into account.