

Exercise 5.10

Tuesday, 15 September 2020 09:18

$$b) \left| \begin{array}{ccc} \psi_1(x_1) |\uparrow\rangle_1 & \psi_1(x_1) |\downarrow\rangle_1 & \psi_2(x_1) |\uparrow\rangle_1 \\ \psi_1(x_2) |\uparrow\rangle_2 & \psi_1(x_2) |\downarrow\rangle_2 & \psi_2(x_2) |\uparrow\rangle_2 \\ \psi_1(x_3) |\uparrow\rangle_3 & \psi_1(x_3) |\downarrow\rangle_3 & \psi(x_3) |\uparrow\rangle_3 \end{array} \right|$$

degeneracy = 2

we could let the particle in ψ_2 have spin down