

QUANTUM PHYSICS II
PROBLEM SET 4
due September 26, before class

A. Learn how to compute your probabilities

The z-component of the spin of an electron is measured and the value $\hbar/2$ is found. Immediately afterwards, the spin along a direction making an angle θ with the z-axis is measured. What are the possible outcomes of this second measurement and with which probabilities they arise?

B. Correlation in a spin singlet (“EPR pair”)

Solve Griffiths 4.50.
