SPINS Lab 3 Tables

Quantum Mechanics

Fall 2019

Unknown state $|\psi_1\rangle$

Probabilities	Axis		
Result	x	y	z
$S_i = \hbar$			
$S_i = 0$			
$S_i = -\hbar$			

Unknown state $|\psi_2\rangle$

Probabilities	Axis		
Result	x	y	z
$S_i = \hbar$			
$S_i = 0$			
$S_i = -\hbar$			

Unknown state $|\psi_3\rangle$

Probabilities	Axis		
Result	x	y	z
$S_i = \hbar$			
$S_i = 0$			
$S_i = -\hbar$			

Unknown state $|\psi_4\rangle$

Probabilities	Axis		
Result	x	y	z
$S_i = \hbar$			
$S_i = 0$			
$S_i = -\hbar$			

Spin 1 Interferometer

Beams	Experiment			Theory		
	$\mathcal{P}_{+1}$	$\mathcal{P}_0$	$\mathcal{P}_{-1}$	$\mathcal{P}_{+1}$	$\mathcal{P}_0$	$\mathcal{P}_{-1}$
$\|1\rangle_x$						
$\|0\rangle_x$						
$\|-1\rangle_x$						
$\|1\rangle_x$, $\|0\rangle_x$						
$\|1\rangle_x$, $\|-1\rangle_x$						
$\|0\rangle_x$, $\|-1\rangle_x$						
$\|1\rangle_x$, $\|0\rangle_x$, $\|-1\rangle_x$						