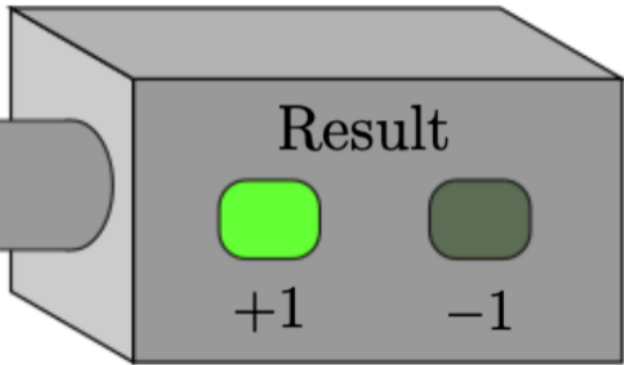


$$|\psi\rangle = \alpha|0\rangle + \beta|1\rangle$$



$$\text{Prob}\{+1\} = |\alpha|^2 \rightarrow \text{state is } |0\rangle$$

$$\text{Prob}\{-1\} = |\beta|^2 \rightarrow \text{state is } |1\rangle$$