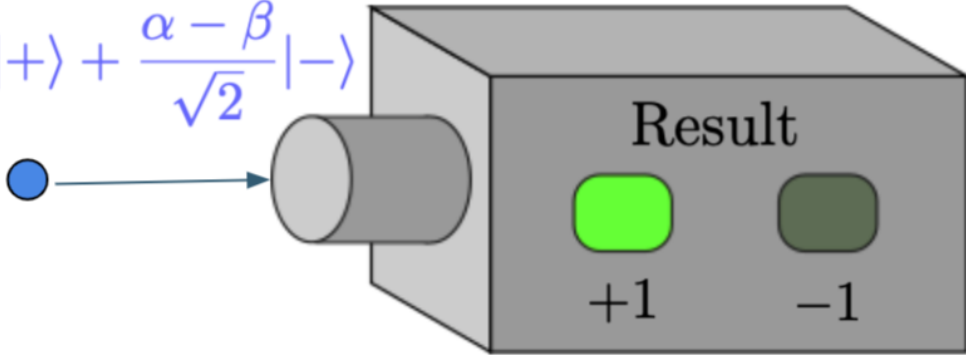$$|\psi\rangle = \frac{\alpha + \beta}{\sqrt{2}}|+\rangle + \frac{\alpha - \beta}{\sqrt{2}}|-\rangle$$

Result

+1   −1

$$\text{Prob}\{+1\} = \frac{|\alpha + \beta|^2}{2} \to \text{state is } |+\rangle$$

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