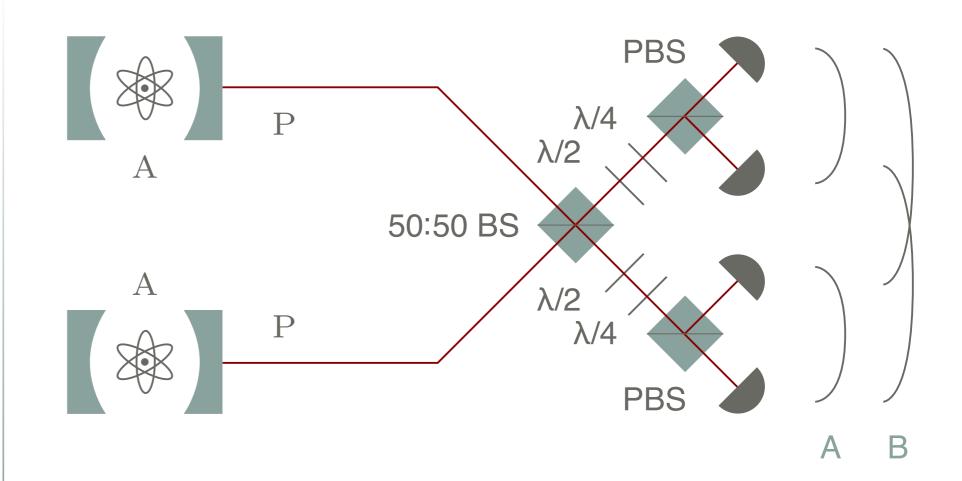
$$5^{2}P_{3/2}$$
 R
 $8^{7}Rb$
 $F=1$
 $5^{2}S_{1/2}$
 $F=1$
 $\downarrow \downarrow \rangle_{z}$
 $\downarrow \uparrow \rangle_{z}$
 $F=1$



$$\begin{aligned} |\Psi\rangle_{\mathrm{AP}} &= \frac{1}{\sqrt{2}} \left(|\downarrow\rangle_z |L\rangle + |\uparrow\rangle_z |R\rangle \right) \\ &= \frac{1}{\sqrt{2}} \left(|\downarrow\rangle_x |V\rangle + |\uparrow\rangle_x |H\rangle \right) \end{aligned}$$

$$\mathbf{A} \qquad |\Psi^{+}\rangle_{\mathrm{AA}} = \frac{1}{\sqrt{2}} \left(|\uparrow\rangle_{x} |\downarrow\rangle_{x} + |\downarrow\rangle_{x} |\uparrow\rangle_{x} \right)$$

$$\mathbf{B} \quad |\Psi^{-}\rangle_{\mathrm{AA}} = \frac{1}{\sqrt{2}} \left(|\uparrow\rangle_{x} |\downarrow\rangle_{x} - |\downarrow\rangle_{x} |\uparrow\rangle_{x} \right)$$