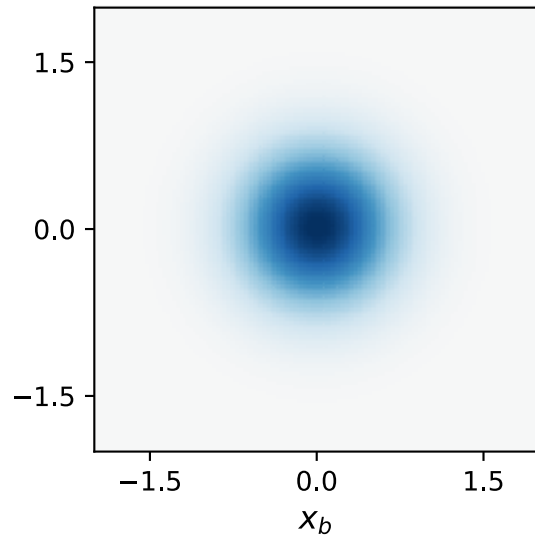
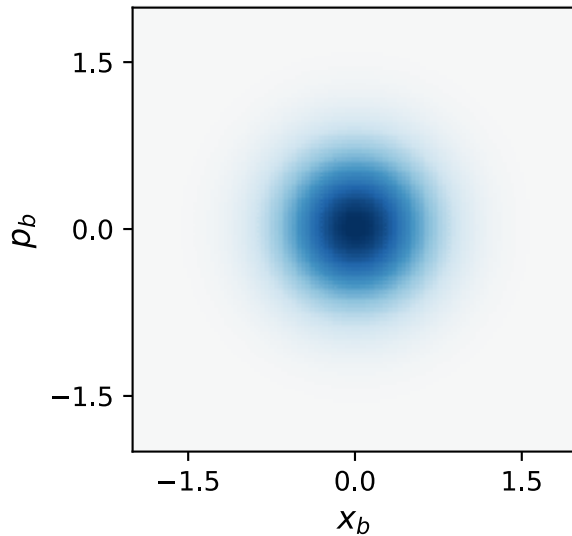


Unconditional

 $|\varphi_f\rangle_a = |0\rangle_a$  $|\varphi_f\rangle_a = \frac{1}{\sqrt{2}}(\sqrt{1-\varepsilon}|0\rangle_a + \sqrt{1+\varepsilon}|1\rangle_a)$ 