

$$(|0\rangle_c + |1\rangle_c) | \text{ellipsoid} \rangle \rightarrow$$

$$|0\rangle_c \left| \text{cylinder with solid blue ring } b \right\rangle + |1\rangle_c \left| \text{cylinder with dashed blue ring } 0 \oplus 0 \right\rangle =$$

$$(e^{i\phi} |0\rangle_c + |1\rangle_c) | \text{ellipsoid} \rangle$$