

Input

$$\phi, \theta \rightarrow \phi_0, \theta_0$$

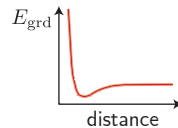
Objective function

$$O(\phi, \theta, \{\langle H \rangle_{U(\phi, \theta)}\})$$

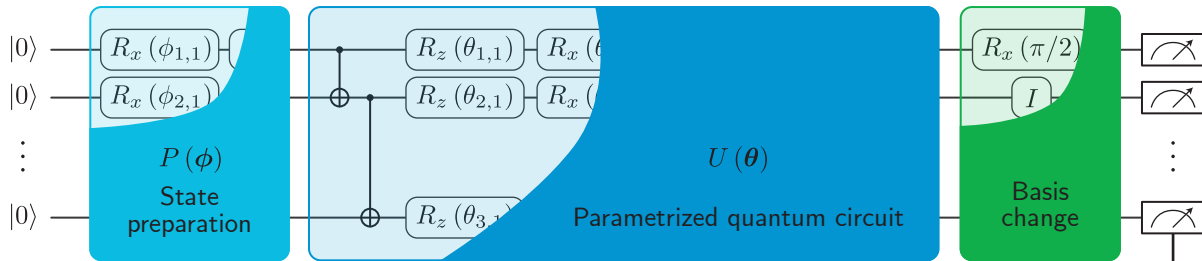
Output

$$\phi_{\text{opt}}, \theta_{\text{opt}}$$

$$E_{\text{grd}} \approx O(\phi_{\text{opt}}, \theta_{\text{opt}})$$



$$U(\phi, \theta)$$



$$\phi, \theta \rightarrow \phi_{\text{new}}, \theta_{\text{new}}$$

$$\min_{\phi, \theta} O(\phi, \theta, \{\langle H \rangle_{U(\phi, \theta)}\})$$

Quantum-classical loop

Classical optimization