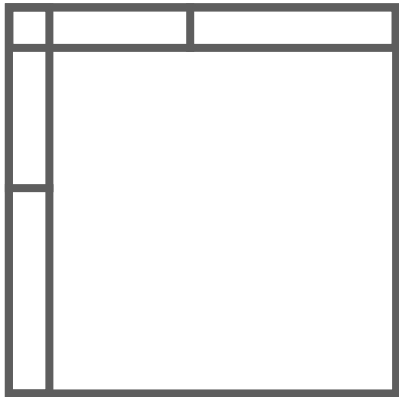


PQE

$$\bar{H} = \hat{U}(\boldsymbol{\theta})^\dagger \hat{H} \hat{U}(\boldsymbol{\theta})$$

$$r_\mu = \langle \Phi_\mu | \bar{H} | \Phi_0 \rangle \rightarrow 0$$

$$\Phi_\mu \in R$$



Propagated PQE

$$\bar{\mathcal{F}} = \hat{U}(\boldsymbol{\theta})^\dagger e^{-i\Delta t \hat{H}} \hat{U}(\boldsymbol{\theta})$$

$$\tilde{r}_\mu = \langle \Phi_\mu | \bar{\mathcal{F}} | \Phi_0 \rangle \rightarrow 0$$

$$\Phi_\mu \in R$$

