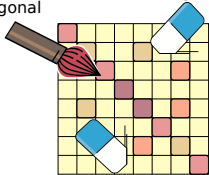


Design

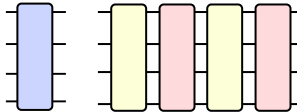
Increasing
diagonal

Erasing off-diag



Erasing off-diag

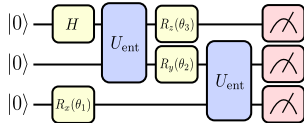
Synthesis



Group commutator formulas

$$\hat{V}^{\text{GC}} = e^{i\hat{A}}e^{i\hat{B}}e^{-i\hat{A}}e^{-i\hat{B}}$$

Compilation



- Hamiltonian simulation
- Trotter-Suzuki decomposition