

# Variational Quantum Eigensolver

Quantum expectation estimation

QPU

CPU

STATE PREPARATION

AVERAGING

AVERAGING

AVERAGING

AVERAGING

AVERAGING

$$\langle \hat{H}_N^1 \rangle$$

$$\langle \hat{H}_N^2 \rangle$$

$$\langle \hat{H}_N^3 \rangle$$

$$\langle \hat{H}_N^4 \rangle$$

$$\langle \hat{H}_N^j \rangle$$

EXPECTATION ADDER

$$\langle \hat{H}_N \rangle$$

OPTIM. DECIDER

*Adjusted parameters*

