

ADAPT Confidence Campaign

Generated (UTC): 2026-02-21T18:25:49.789670+00:00

Scope:

Methods: exact, HF, hardcoded VQE, Qiskit VQE, ADAPT-UCCSD(adapt/fixed), ADAPT-CSE

Sites: [2]

Gates:

VQE: L2<=1.0e-08, L3<=1.0e-06

ADAPT-UCCSD fixed: L2<=1.0e-08, L3<=1.0e-06

ADAPT-UCCSD adapt: L2<=1.0e-07, L3<=1.0e-05

ADAPT-CSE: gap\_closure>=0.90

Run caps:

per\_method\_max\_time\_s=90.0

adapt\_trial\_max\_time\_s=30.0

adapt\_fixed\_trial\_max\_time\_s=45.0

L=2 (n\_up=1, n\_down=1)

Exact=-0.836057118155 HF= 4.500000000000

Hardcoded VQE (UCCSD) E=-0.836057110705 |dE|=7.450e-09 t=0.18s gate\_pass=True

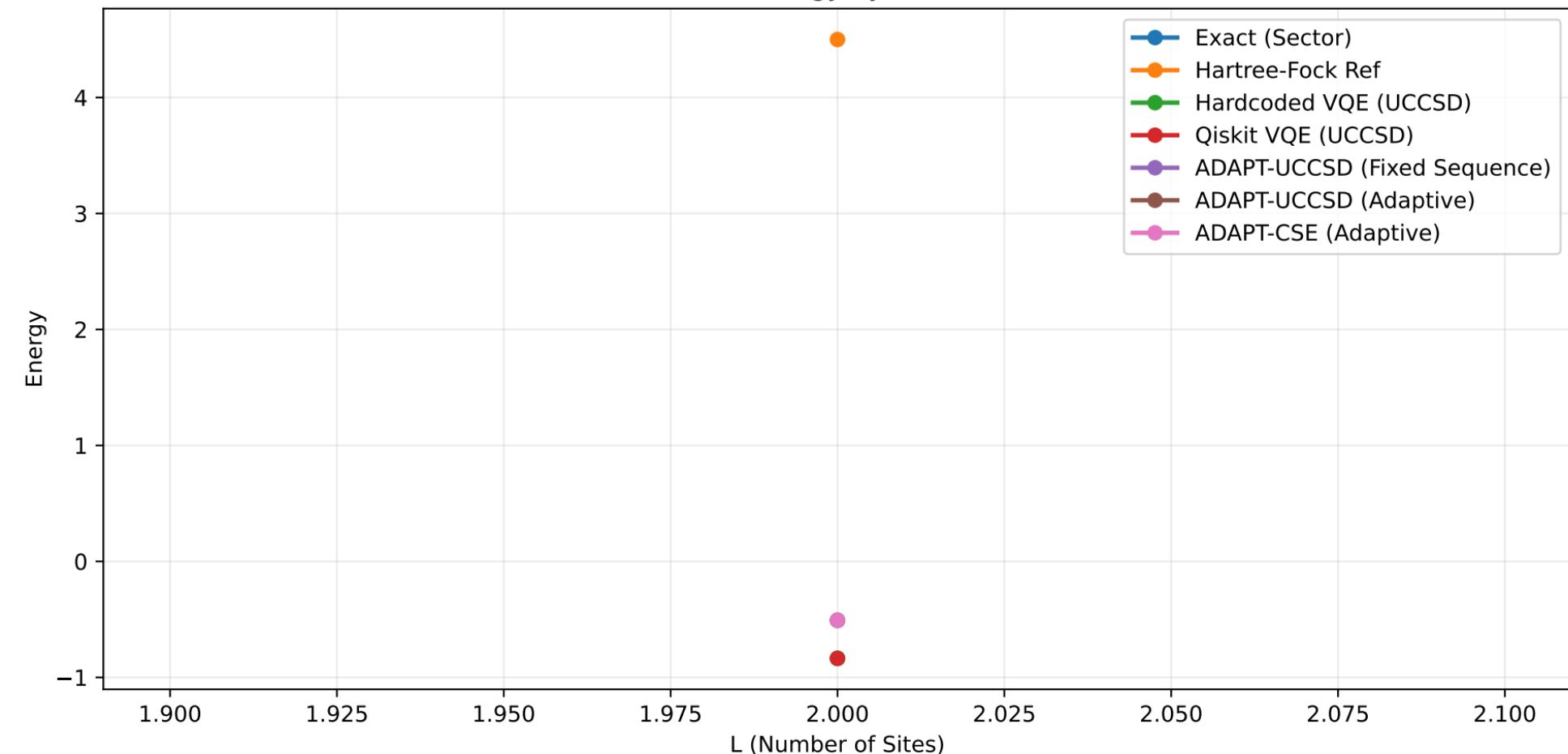
Qiskit VQE (UCCSD) E=-0.836057117595 |dE|=5.600e-10 t=1.81s gate\_pass=True

ADAPT-UCCSD (Fixed Sequence) E=-0.507936507937 |dE|=3.281e-01 t=13.14s gate\_pass=False

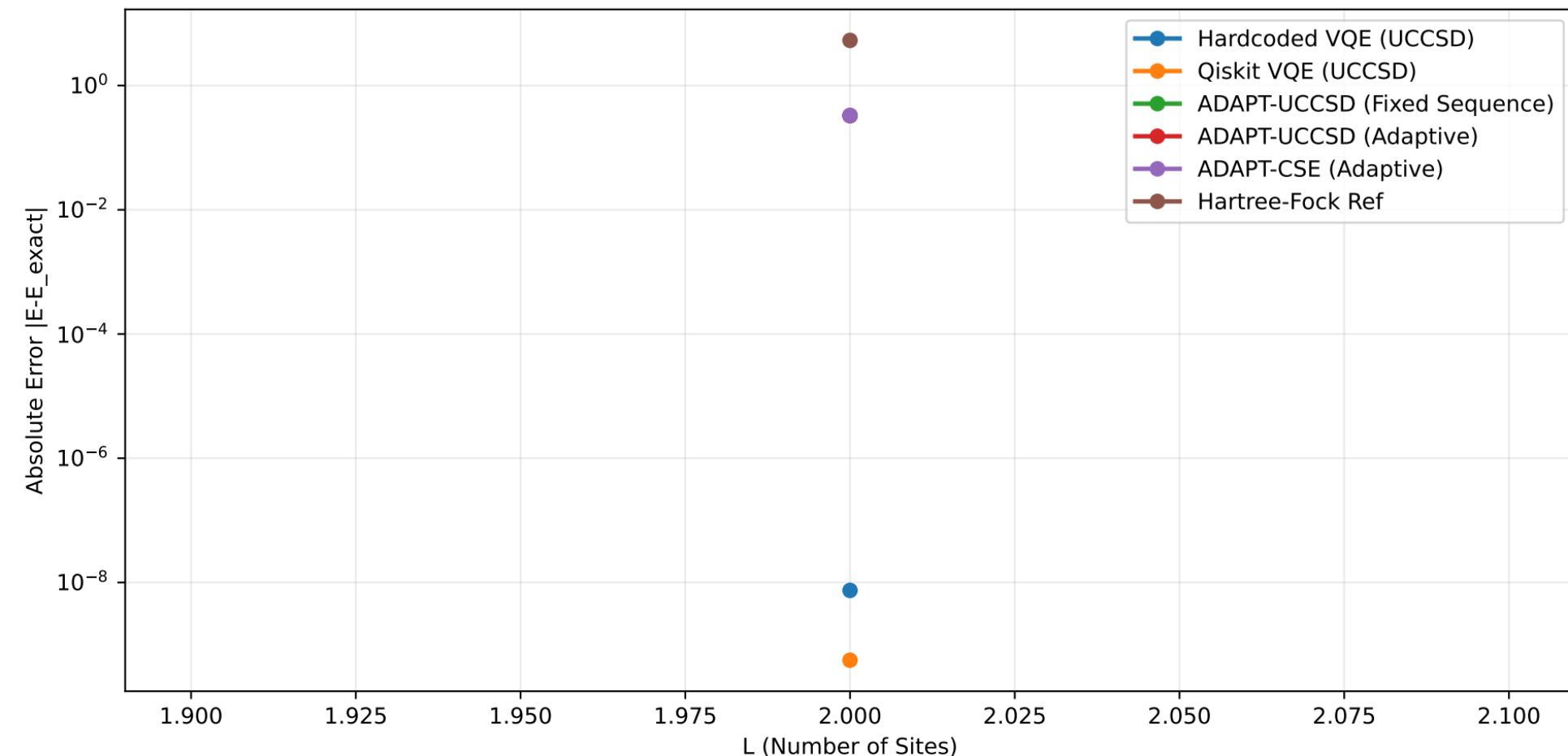
ADAPT-UCCSD (Adaptive) E=-0.507936507936 |dE|=3.281e-01 t=17.49s gate\_pass=False

ADAPT-CSE (Adaptive) E=-0.506312970694 |dE|=3.297e-01 t=5.68s gate\_pass=True

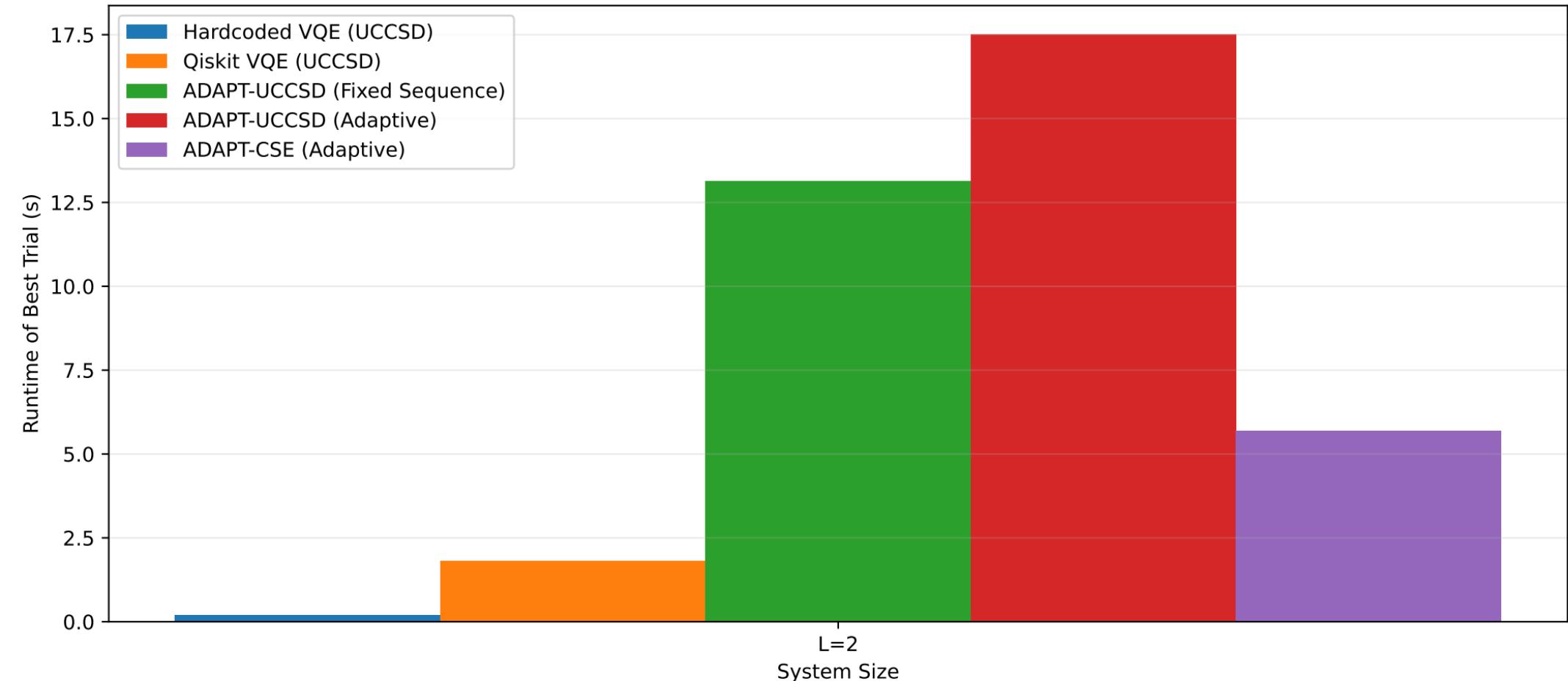
## Best Energy by Method



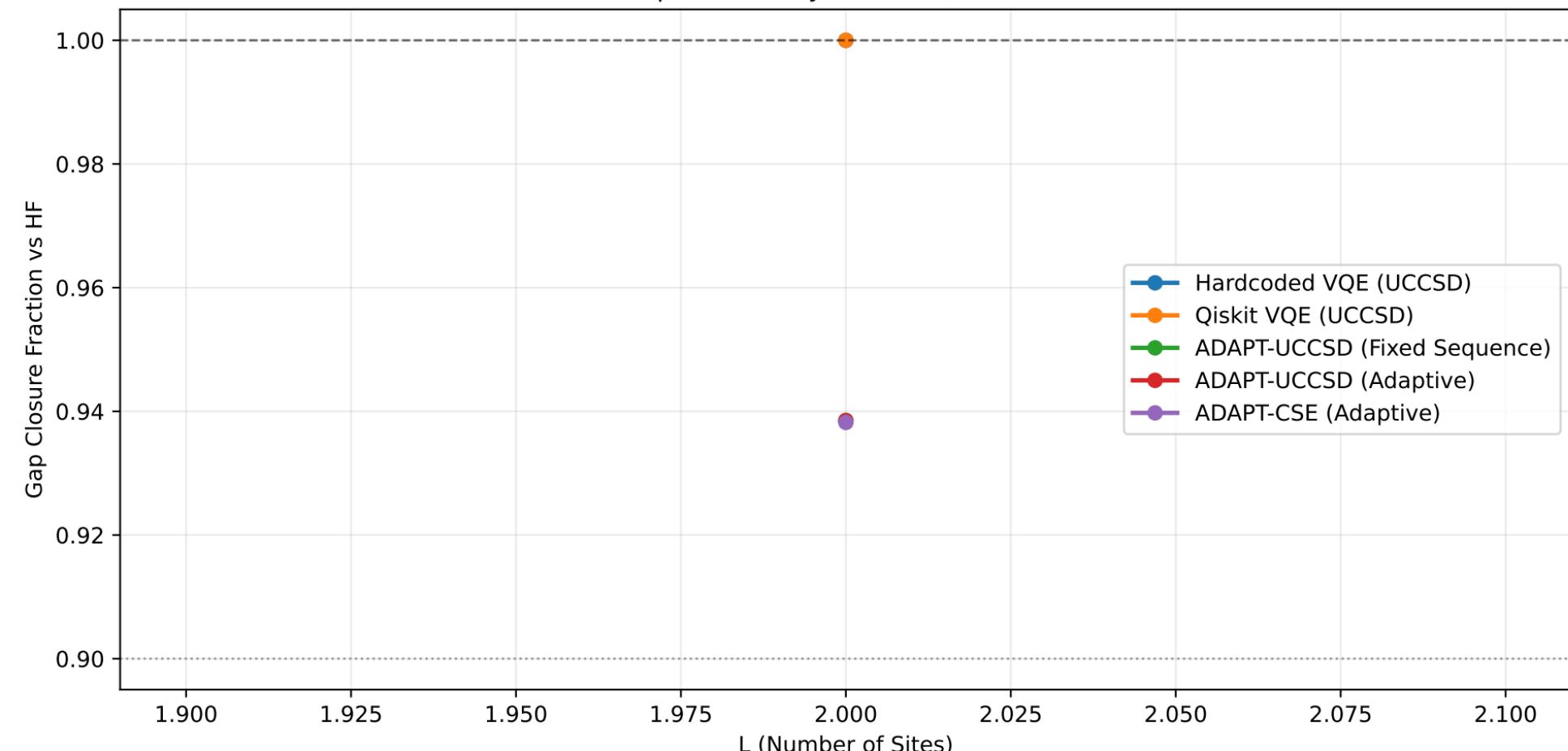
## Best Absolute Error vs Exact



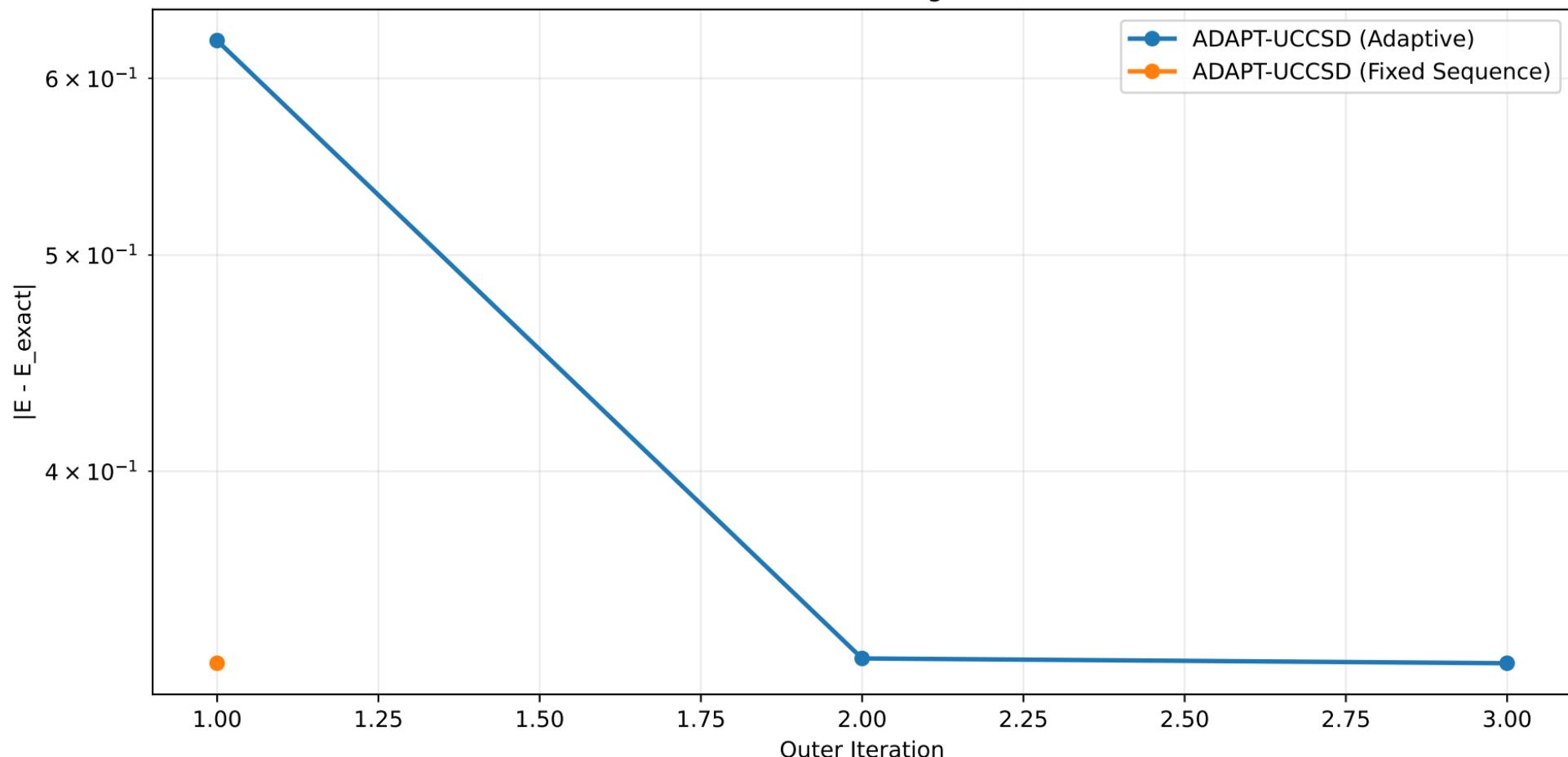
### Best-Trial Runtime by Method



### HF Gap-Closure by Method (1.0 = exact)



### ADAPT-UCCSD Convergence (L=2)



### ADAPT-CSE Convergence (L=2)

