

ADAPT Confidence Campaign

Generated (UTC): 2026-02-21T19:00:03.611458+00:00

Scope:

Methods: exact, HF, hardcoded VQE, Qiskit VQE, ADAPT-UCCSD(adapt/fixed), ADAPT-CSE  
Sites: [2, 3]

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=12.0  
adapt\_trial\_max\_time\_s=2.0  
adapt\_fixed\_trial\_max\_time\_s=3.0

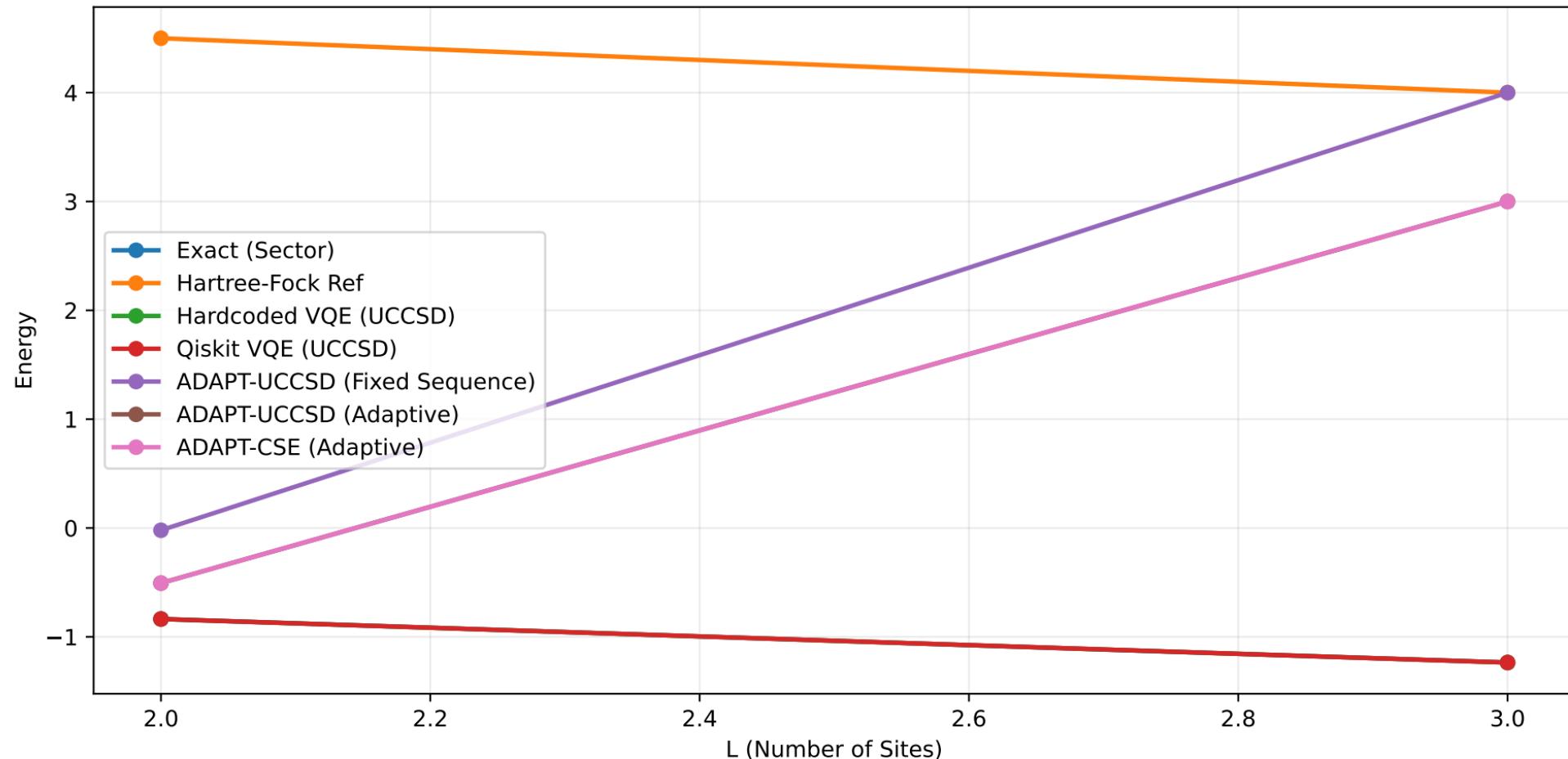
L=2 (n\_up=1, n\_down=1)

Exact=-0.836057118155	HF= 4.500000000000
Hardcoded VQE (UCCSD)	E=-0.836057054830  dE =6.333e-08 t=0.10s gate_pass=False
Qiskit VQE (UCCSD)	E=-0.836057117595  dE =5.600e-10 t=4.96s gate_pass=True
ADAPT-UCCSD (Fixed Sequence)	E=-0.020821263064  dE =8.152e-01 t=6.24s gate_pass=False
ADAPT-UCCSD (Adaptive)	E=-0.506312970694  dE =3.297e-01 t=5.51s gate_pass=False
ADAPT-CSE (Adaptive)	E=-0.506312970694  dE =3.297e-01 t=5.17s gate_pass=True

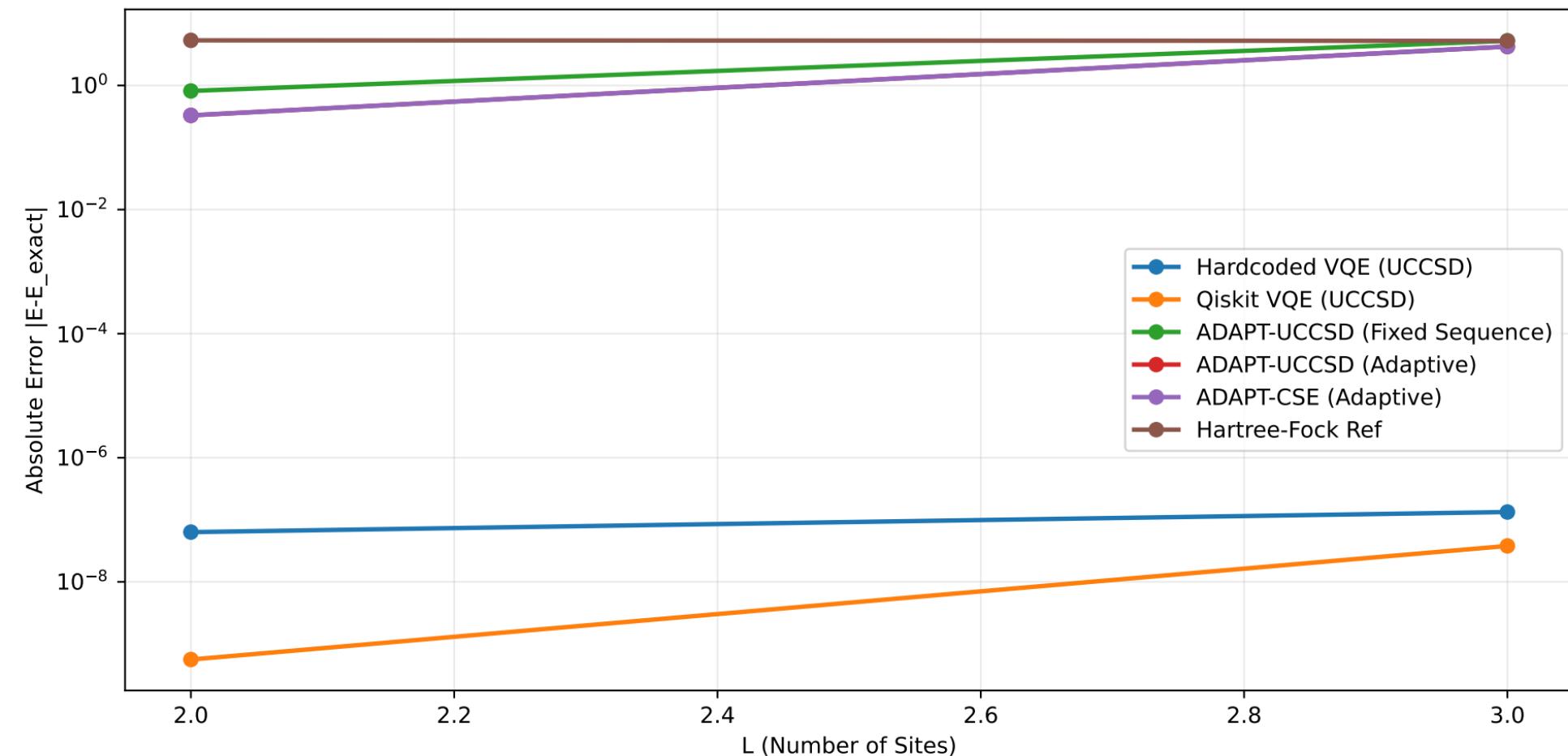
L=3 (n\_up=2, n\_down=1)

Exact=-1.236067977500	HF= 4.000000000000
Hardcoded VQE (UCCSD)	E=-1.236067844029  dE =1.335e-07 t=4.61s gate_pass=True
Qiskit VQE (UCCSD)	E=-1.236067939546  dE =3.795e-08 t=84.09s gate_pass=True
ADAPT-UCCSD (Fixed Sequence)	E= 4.000000000000  dE =5.236e+00 t=5.92s gate_pass=False
ADAPT-UCCSD (Adaptive)	E= 3.000000000000  dE =4.236e+00 t=2.05s gate_pass=False
ADAPT-CSE (Adaptive)	E= 3.000000000000  dE =4.236e+00 t=1.76s gate_pass=False

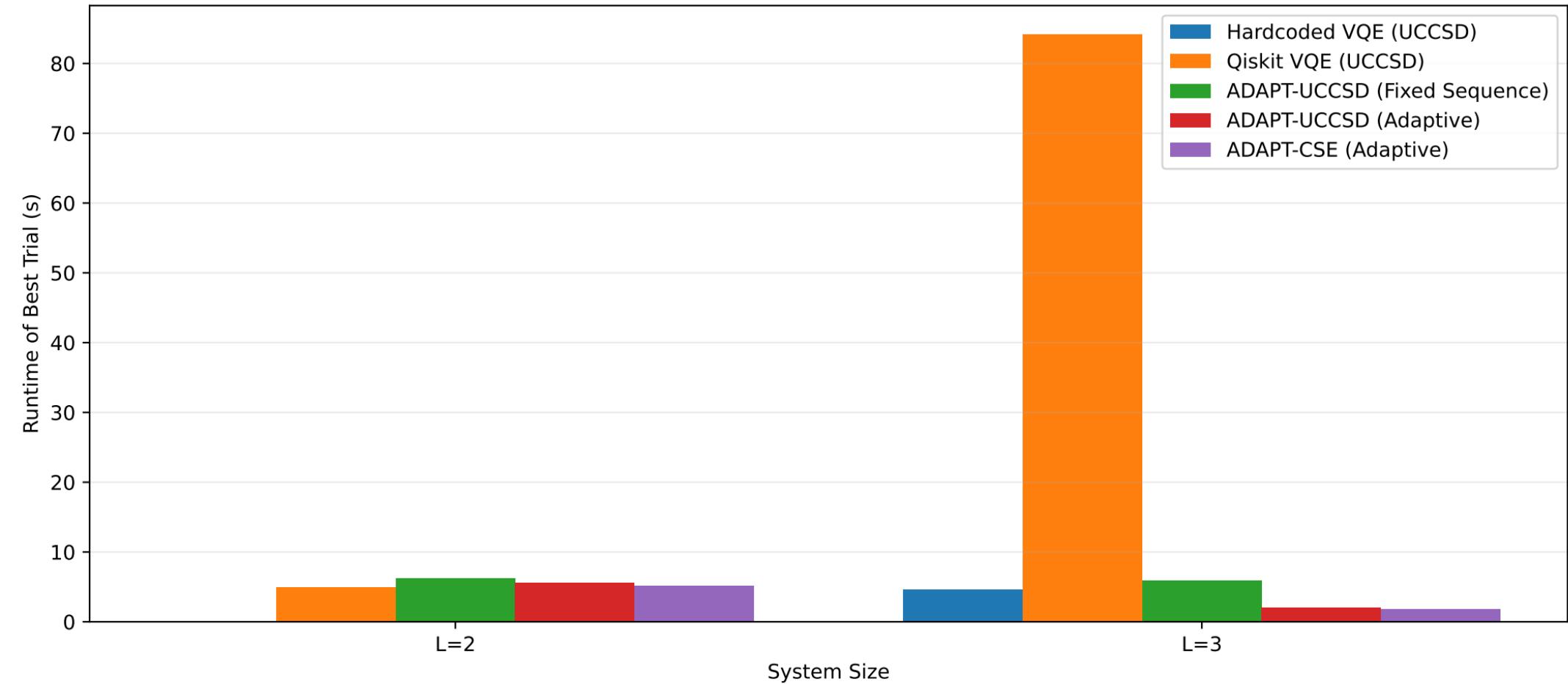
## Best Energy by Method



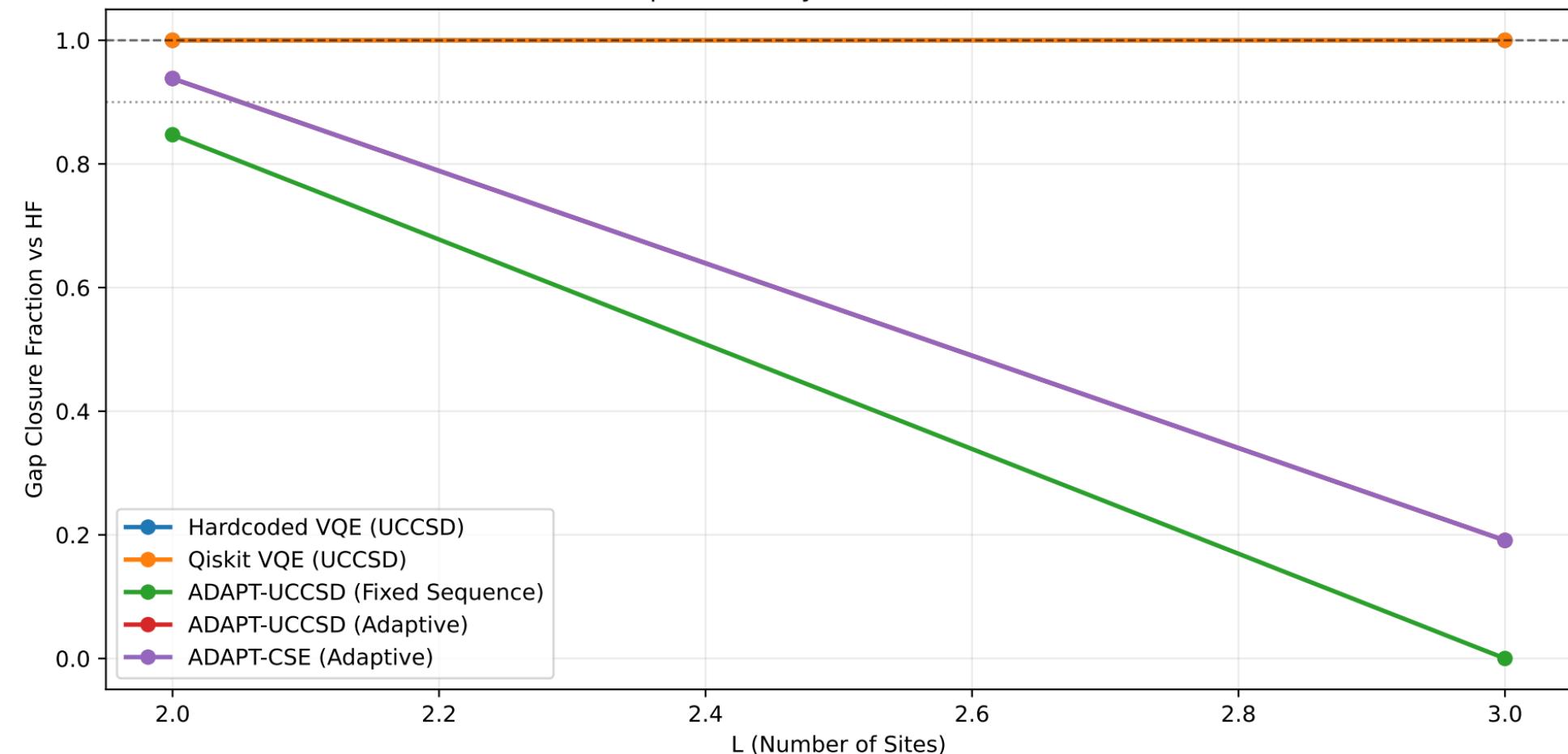
# Best Absolute Error vs Exact



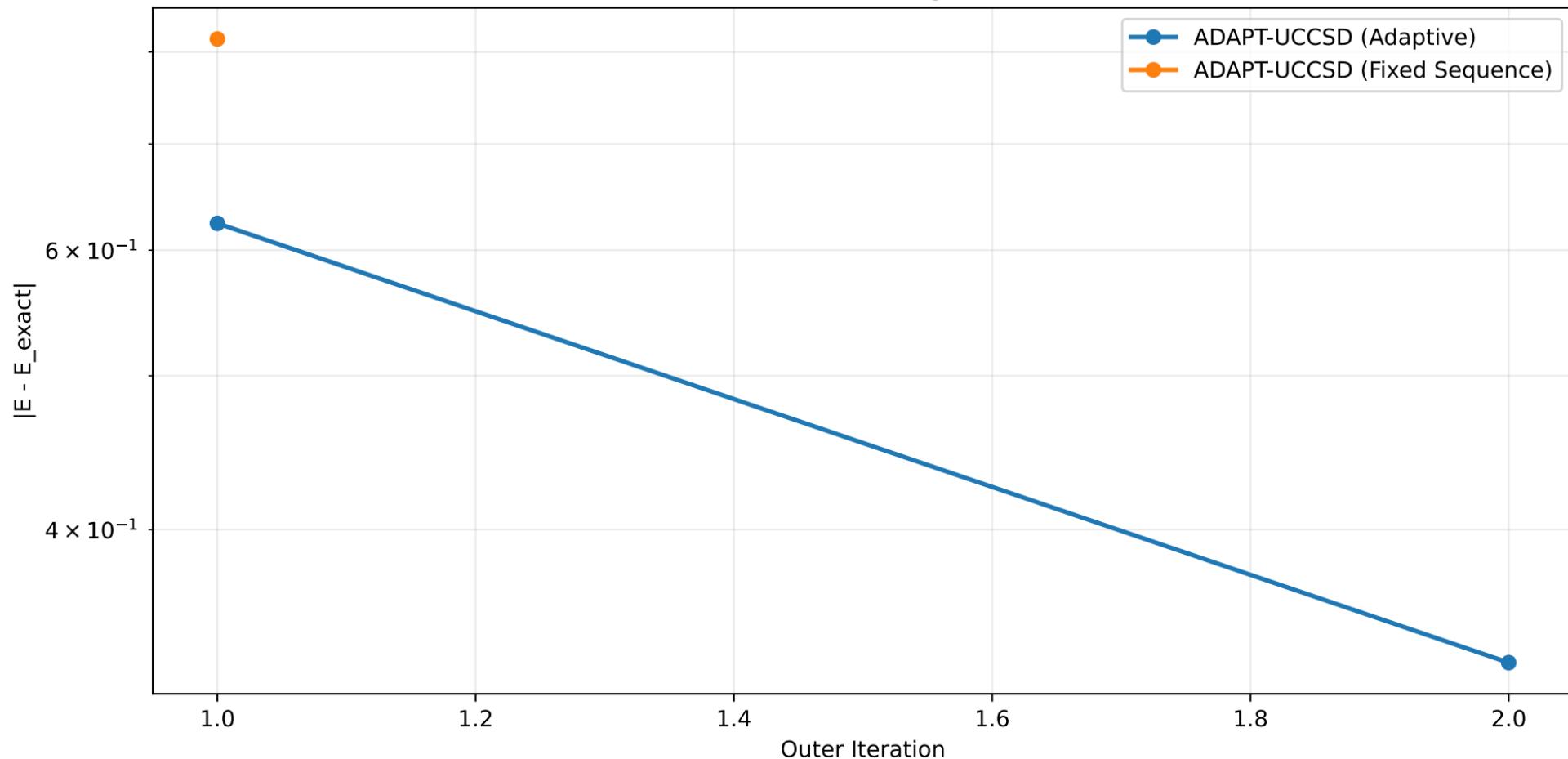
### Best-Trial Runtime by Method



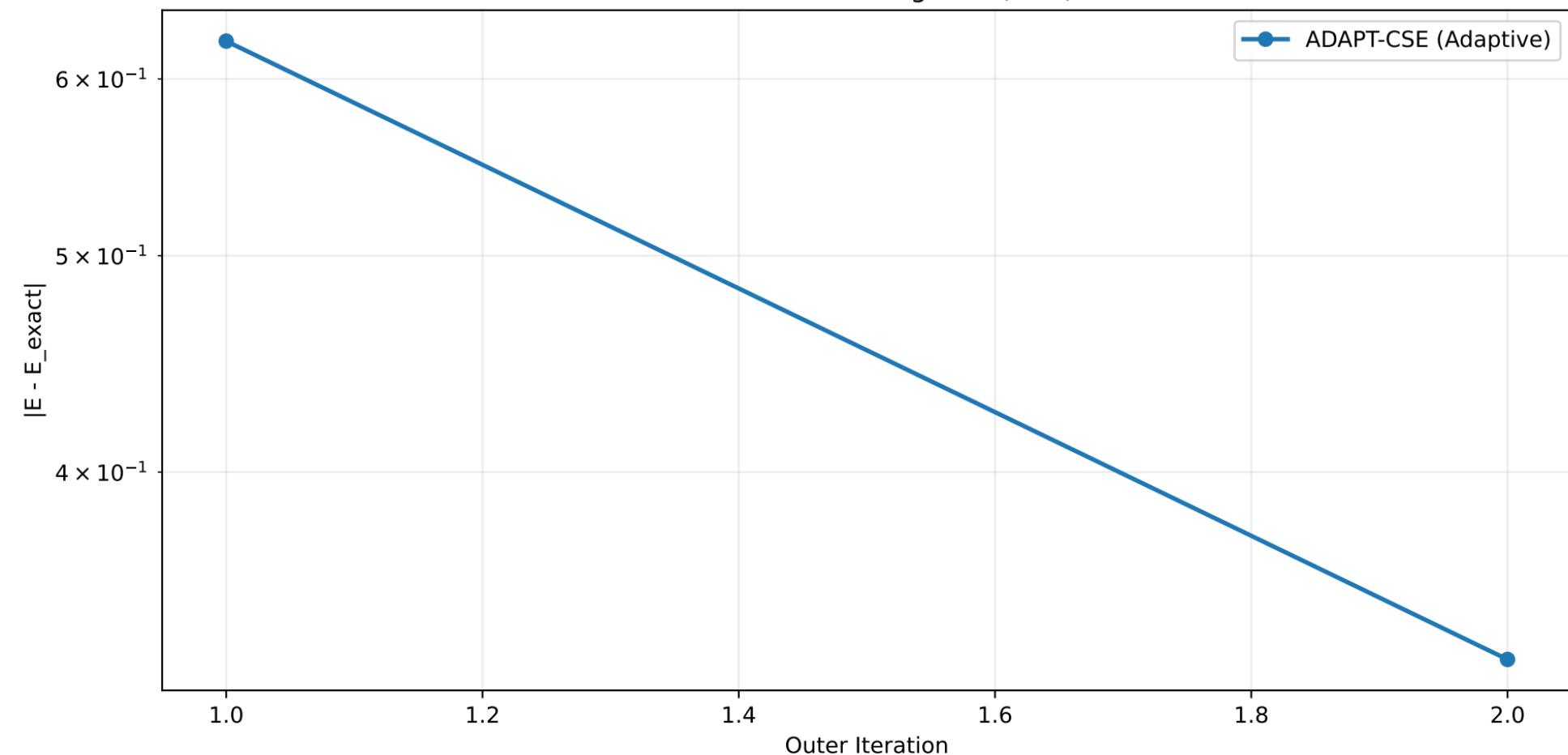
### HF Gap-Closure by Method (1.0 = exact)



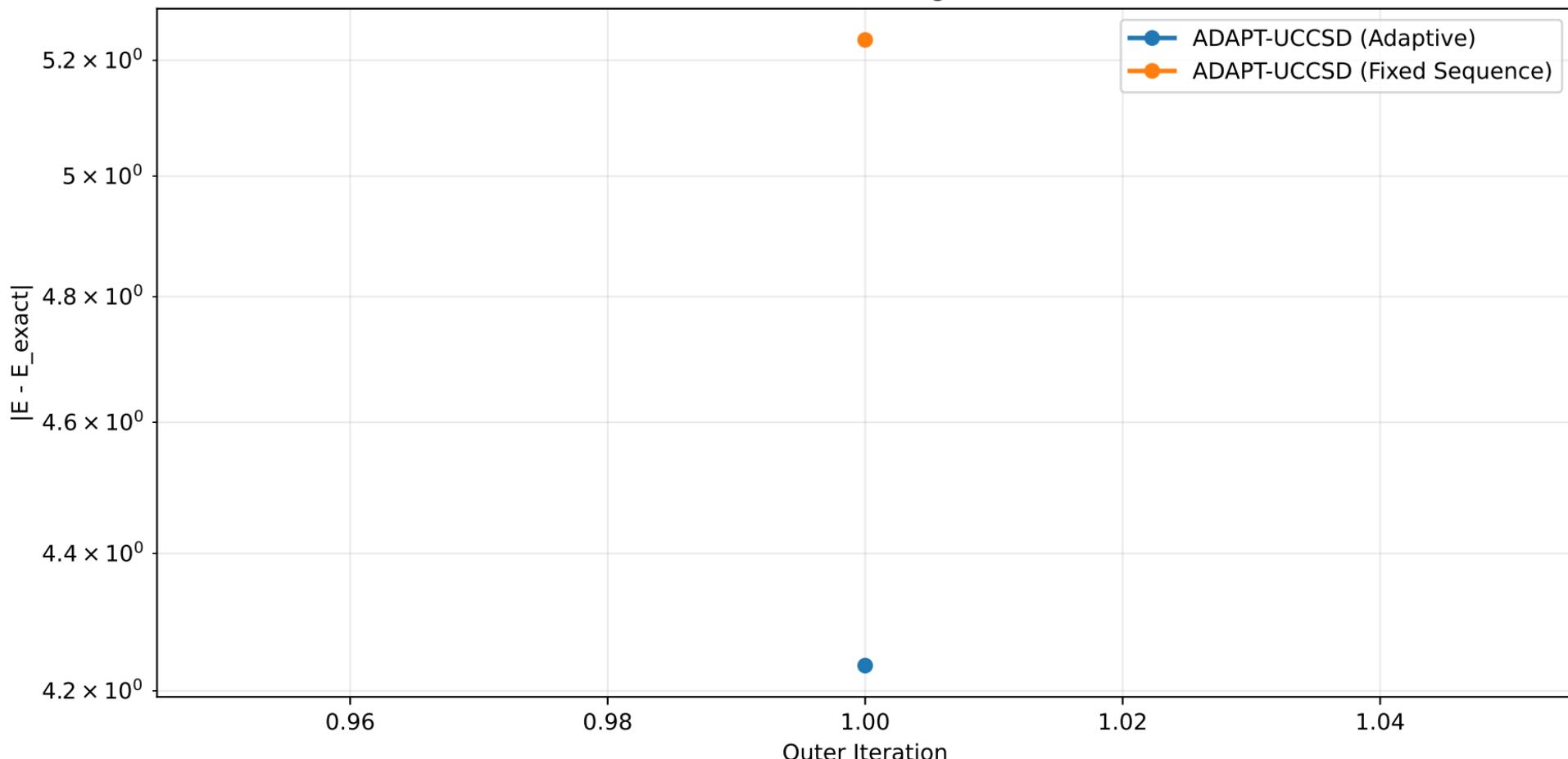
### ADAPT-UCCSD Convergence (L=2)



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



### ADAPT-UCCSD Convergence (L=3)



### ADAPT-CSE Convergence (L=3)

