

ADAPT/VQE Benchmark Summary

Generated (UTC): 2026-02-21T19:45:42.907174+00:00

Settings:

sites=[2, 3] t=1.0 u=4.0 dv=0.5 boundary=open ordering=blocked odd_policy=min_sz
ADAPT(inner_optimizer=lbgfs, inner_steps=600, max_depth=20, max_time_s=600.0, allow_repeats=True)
VQE(reps=2, restarts=3, maxiter=600, seed=7)

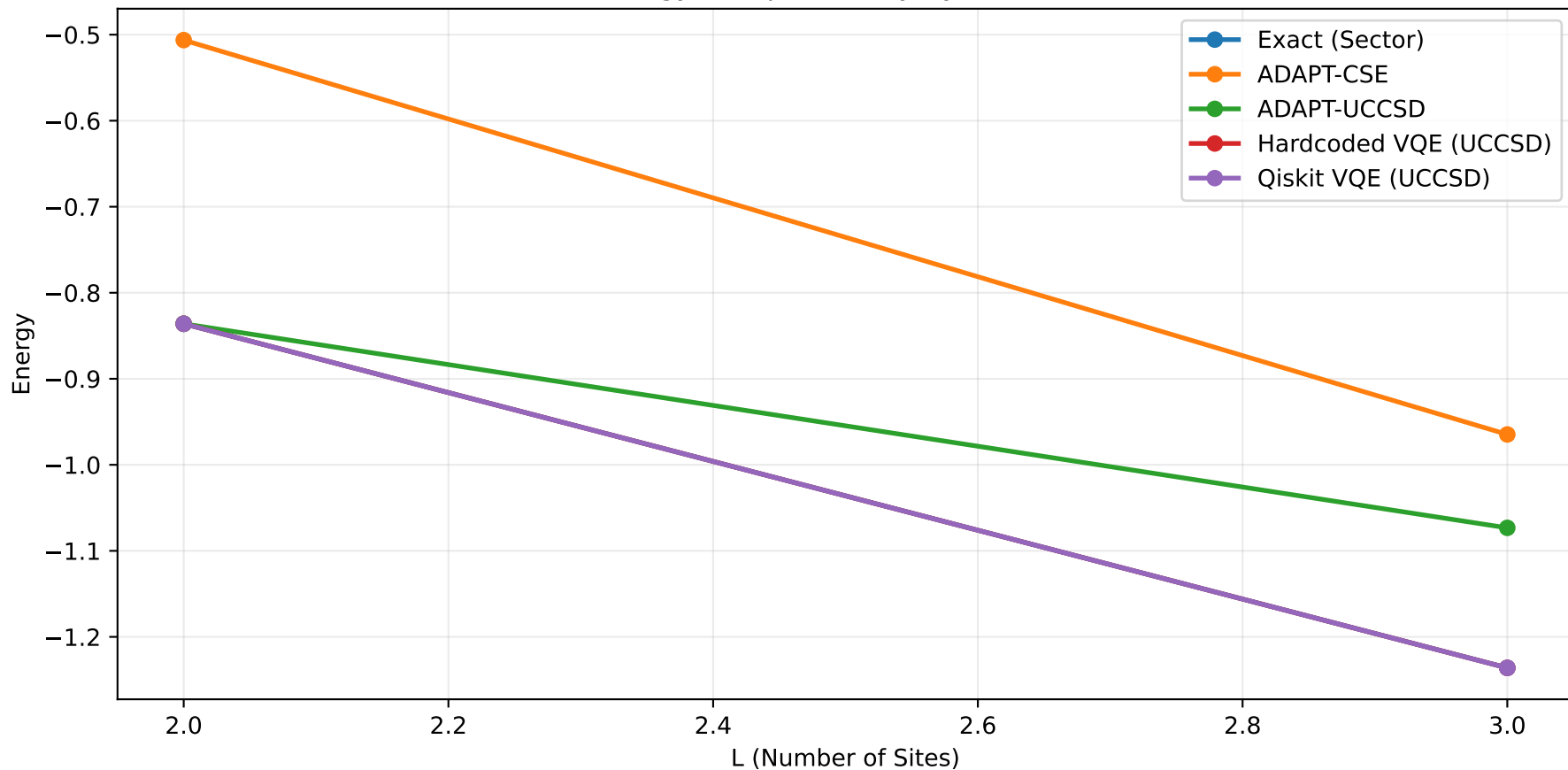
L=2 (n_up=1, n_down=1)

Exact (Sector)	E=-0.836057118155	dE =0.000e+00	t=0.00s
ADAPT-CSE	E=-0.506312970693	dE =3.297e-01	t=7.90s
ADAPT-UCCSD	E=-0.836057118155	dE =1.465e-14	t=55.47s
Hardcoded VQE (UCCSD)	E=-0.836057108255	dE =9.900e-09	t=0.20s
Qiskit VQE (UCCSD)	E=-0.836057117595	dE =5.600e-10	t=9.53s

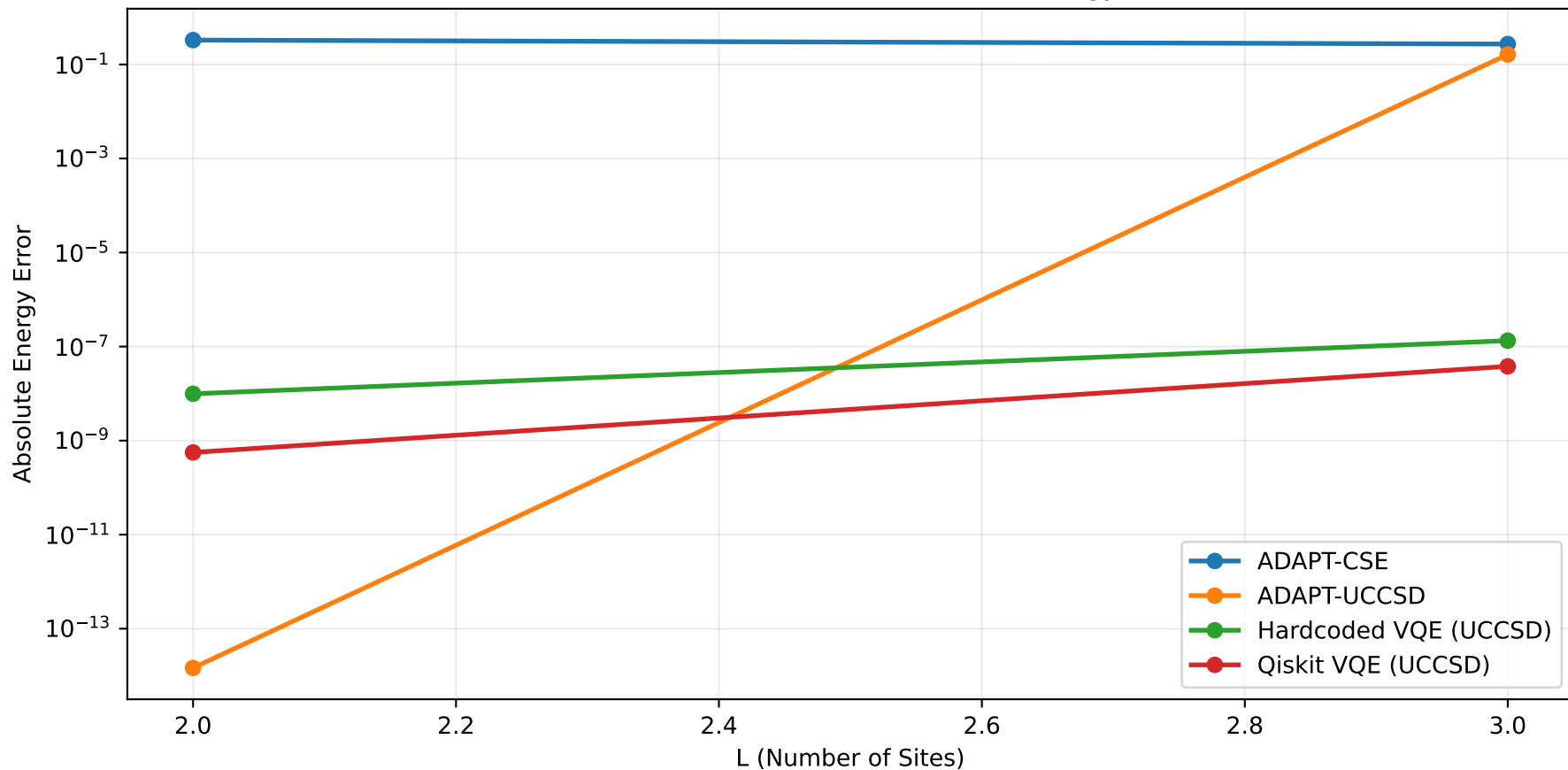
L=3 (n_up=2, n_down=1)

Exact (Sector)	E=-1.236067977500	dE =0.000e+00	t=0.00s
ADAPT-CSE	E=-0.964712231466	dE =2.714e-01	t=113.55s
ADAPT-UCCSD	E=-1.073284225087	dE =1.628e-01	t=881.55s
Hardcoded VQE (UCCSD)	E=-1.236067844029	dE =1.335e-07	t=8.56s
Qiskit VQE (UCCSD)	E=-1.236067939546	dE =3.795e-08	t=136.60s

Energy Comparison by System Size



Absolute Error vs Exact Sector Energy



Runtime by Method

