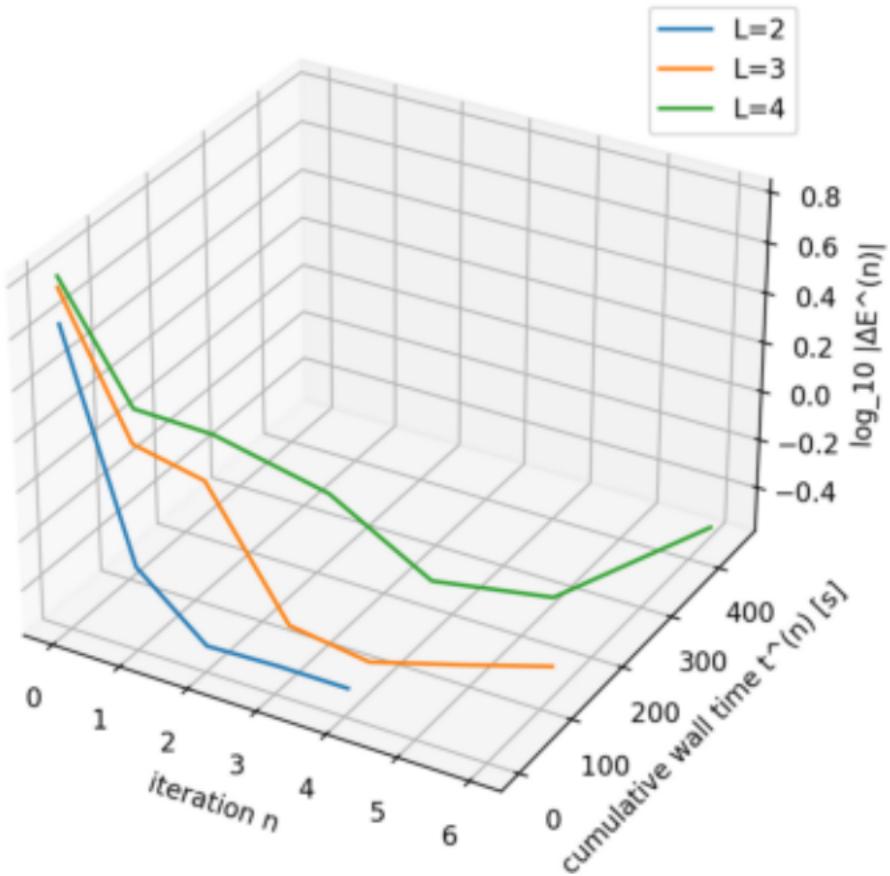
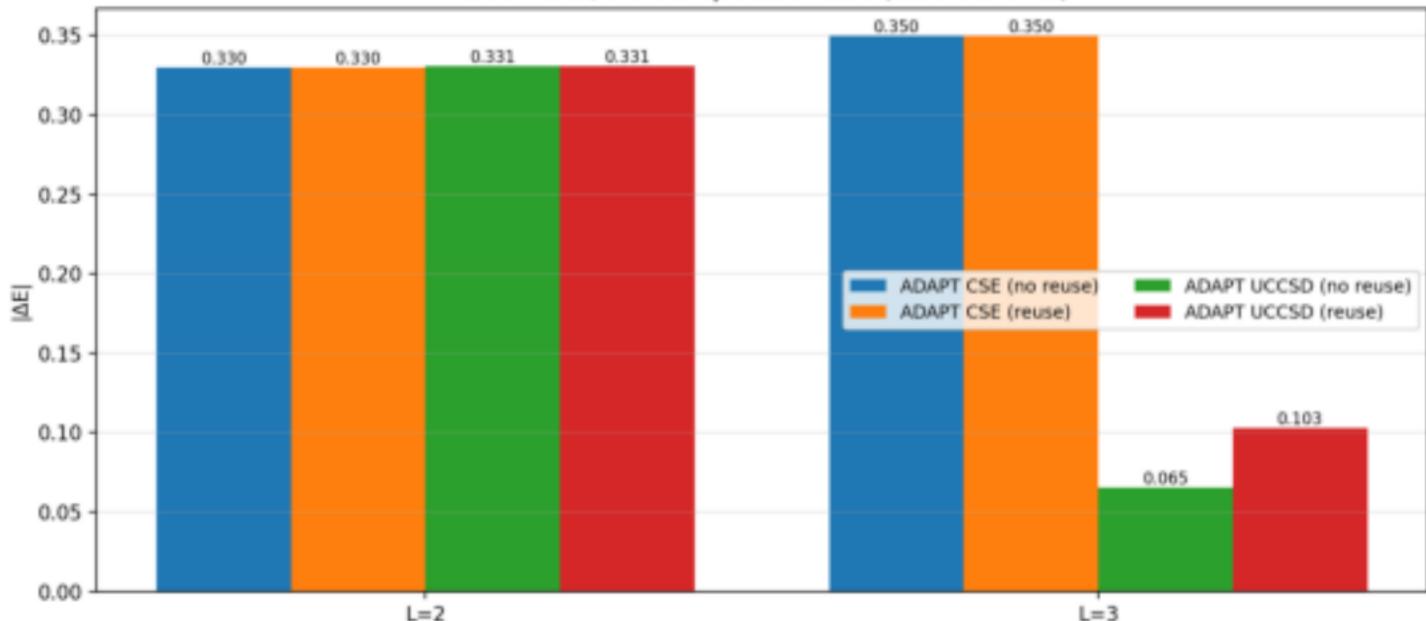


runs/adapt3d\_L2\_L3\_L4.png

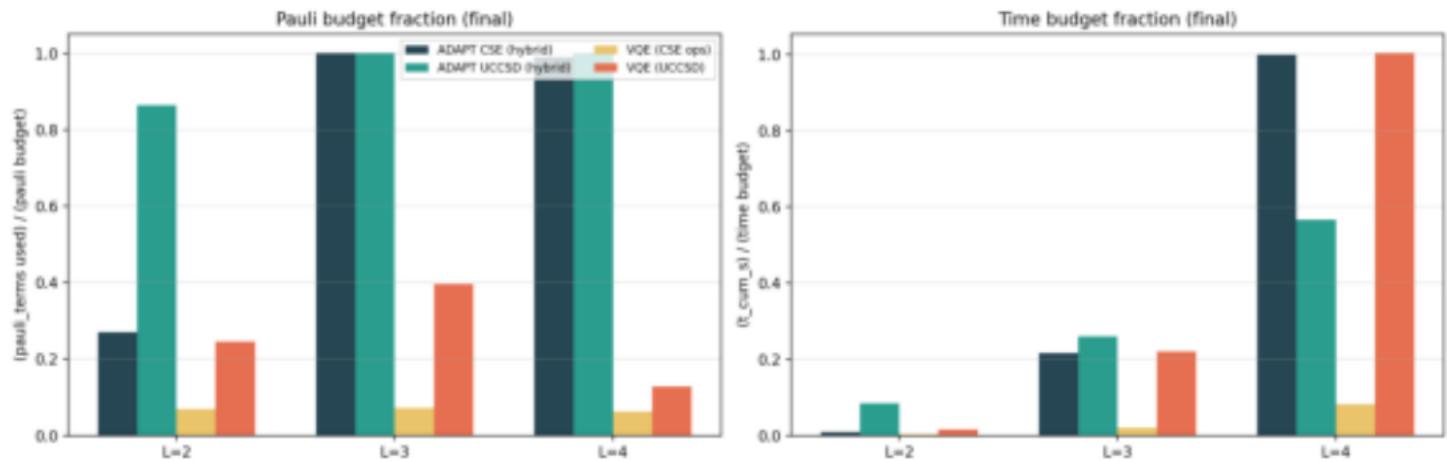


runs/compare\_adapt\_reuse/compare\_bar\_abs\_L2\_L3.png

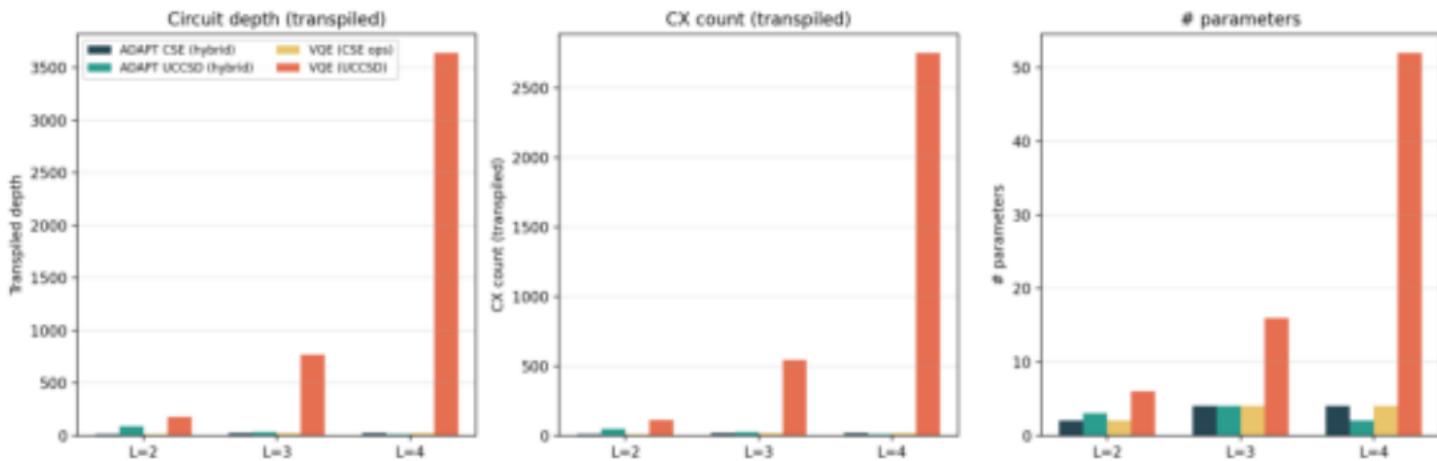
ADAPT with/without operator reuse (absolute error)



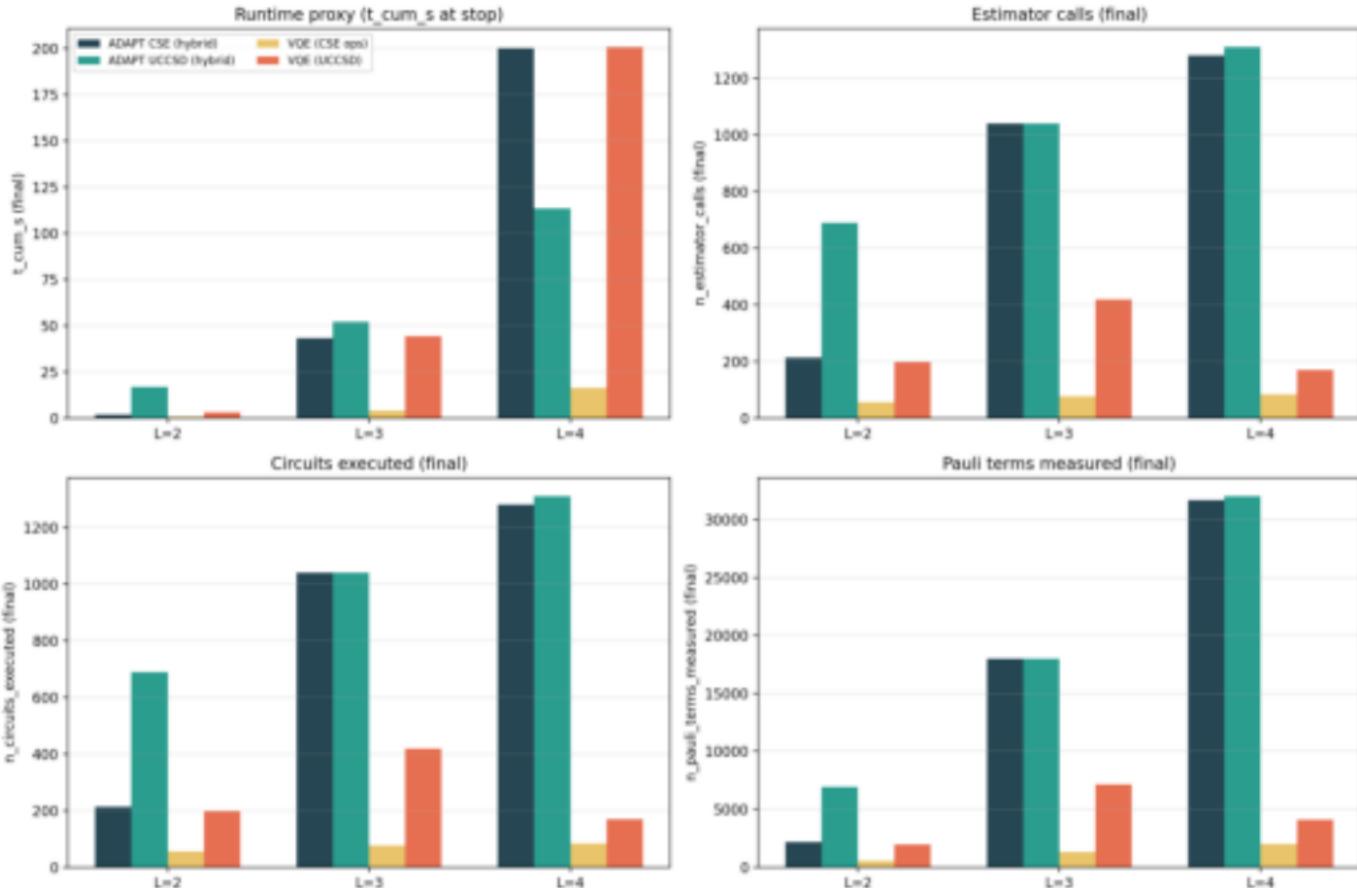
runs/compare\_vqe/bench\_budget\_fractions\_L2\_L3\_L4.png



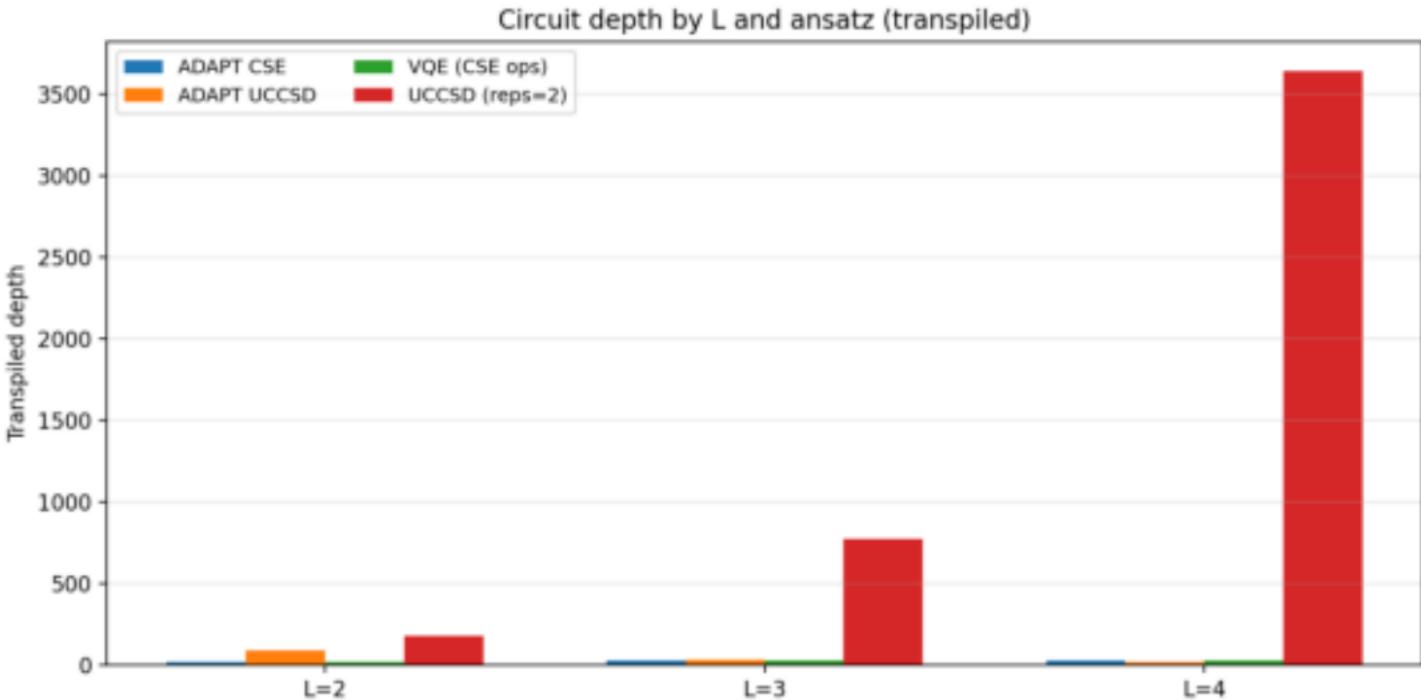
runs/compare\_vqe/bench\_circuit\_metrics\_L2\_L3\_L4.png



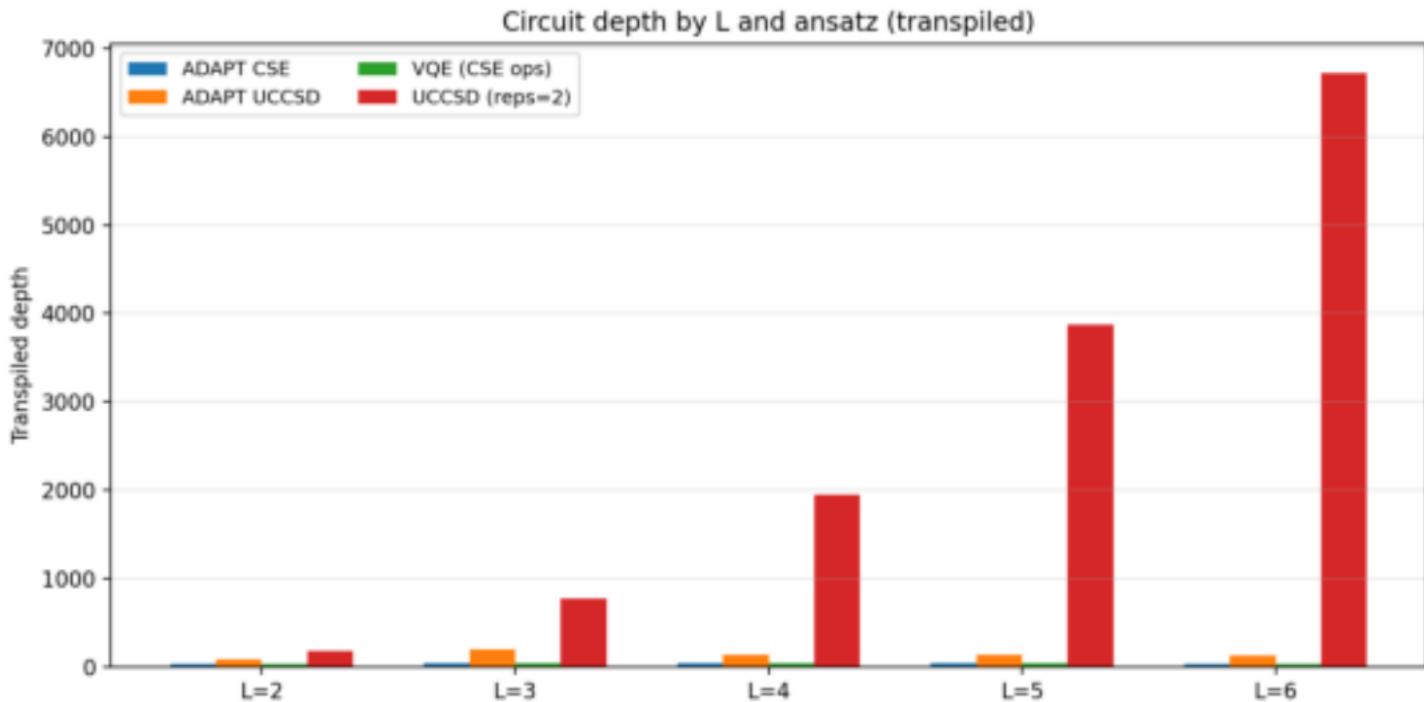
runs/compare\_vqe/bench\_cost\_metrics\_L2\_L3\_L4.png



runs/compare\_vqe/bench\_depth\_transpiled\_L2\_L3\_L4.png

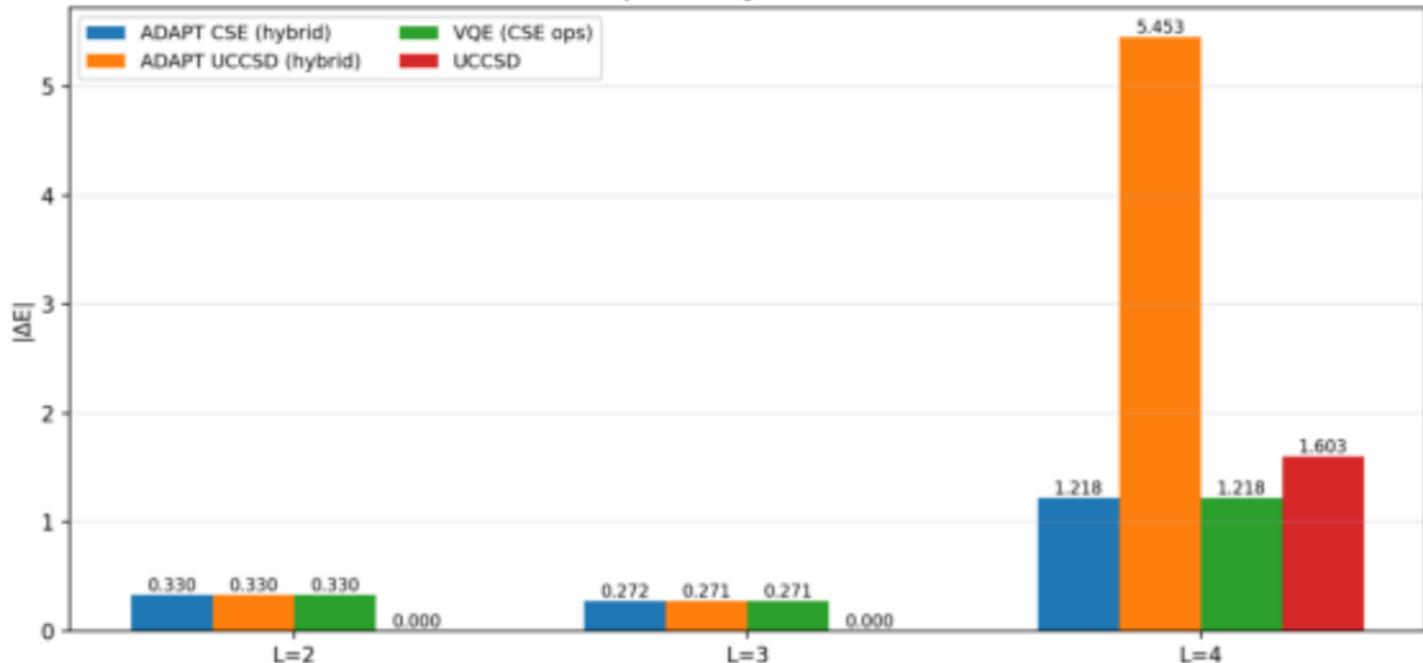


runs/compare\_vqe/circuit\_metrics\_depth.png

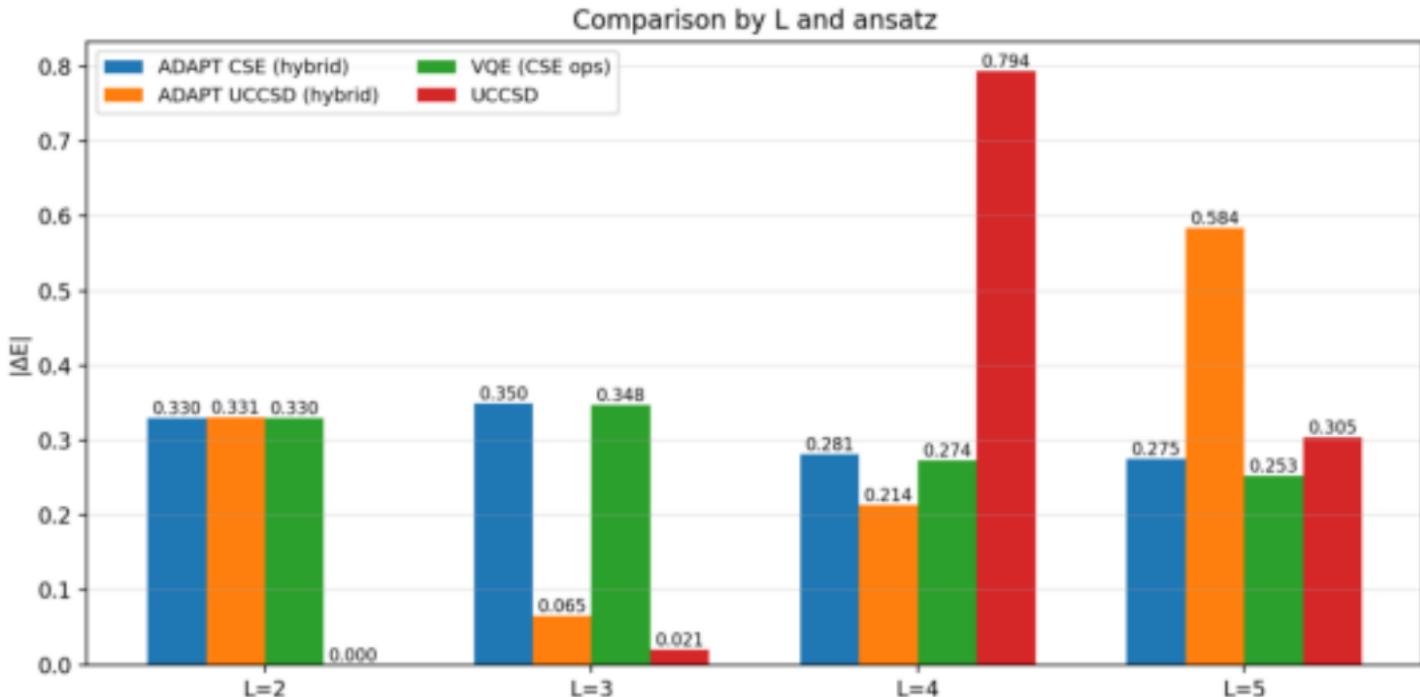


runs/compare\_vqe/compare\_bar\_abs\_L2\_L3\_L4.png

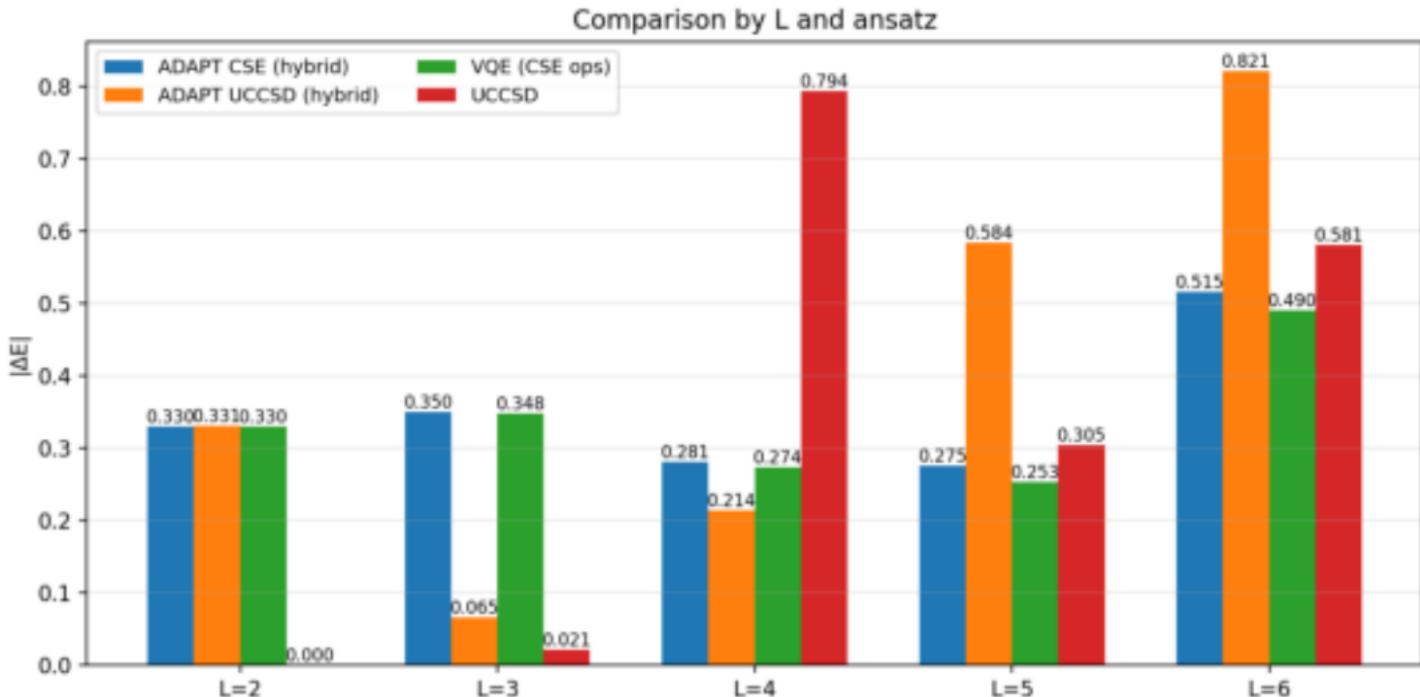
Comparison by L and ansatz



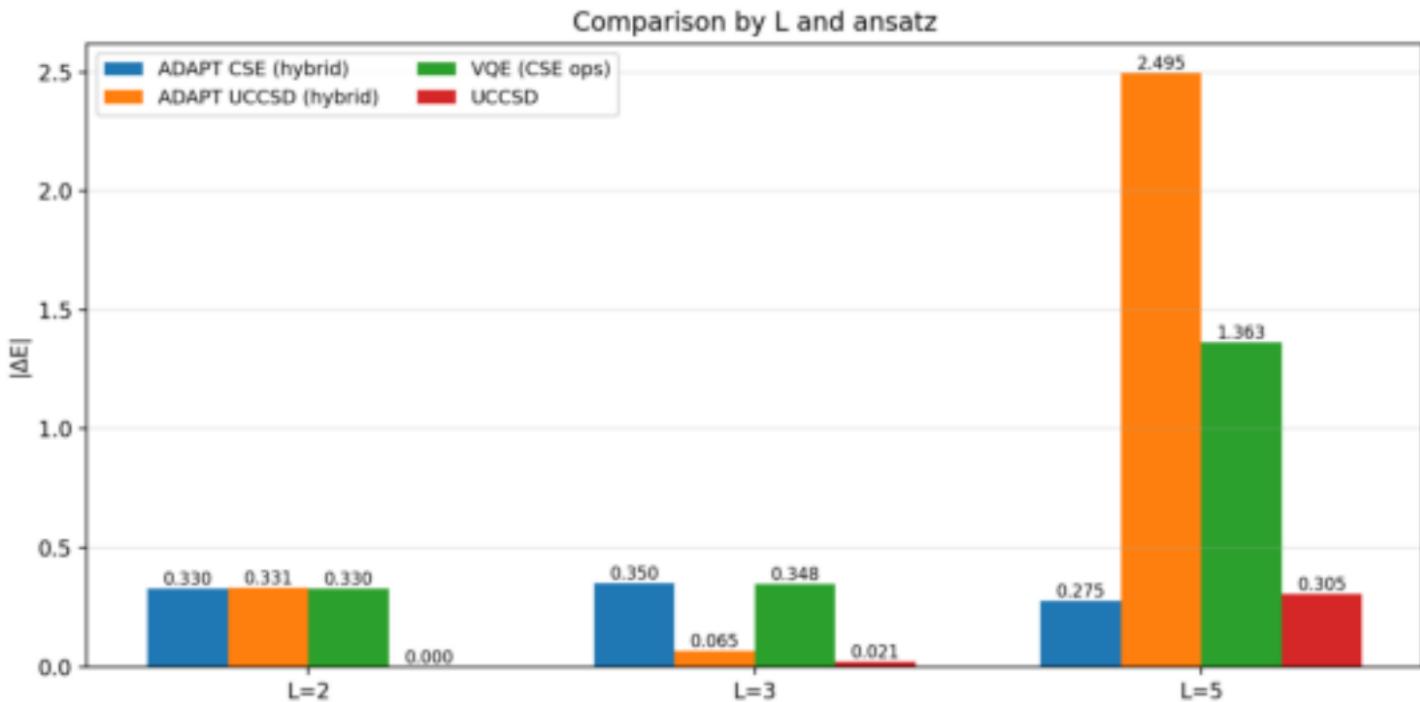
runs/compare\_vqe/compare\_bar\_abs\_L2\_L3\_L4\_L5.png



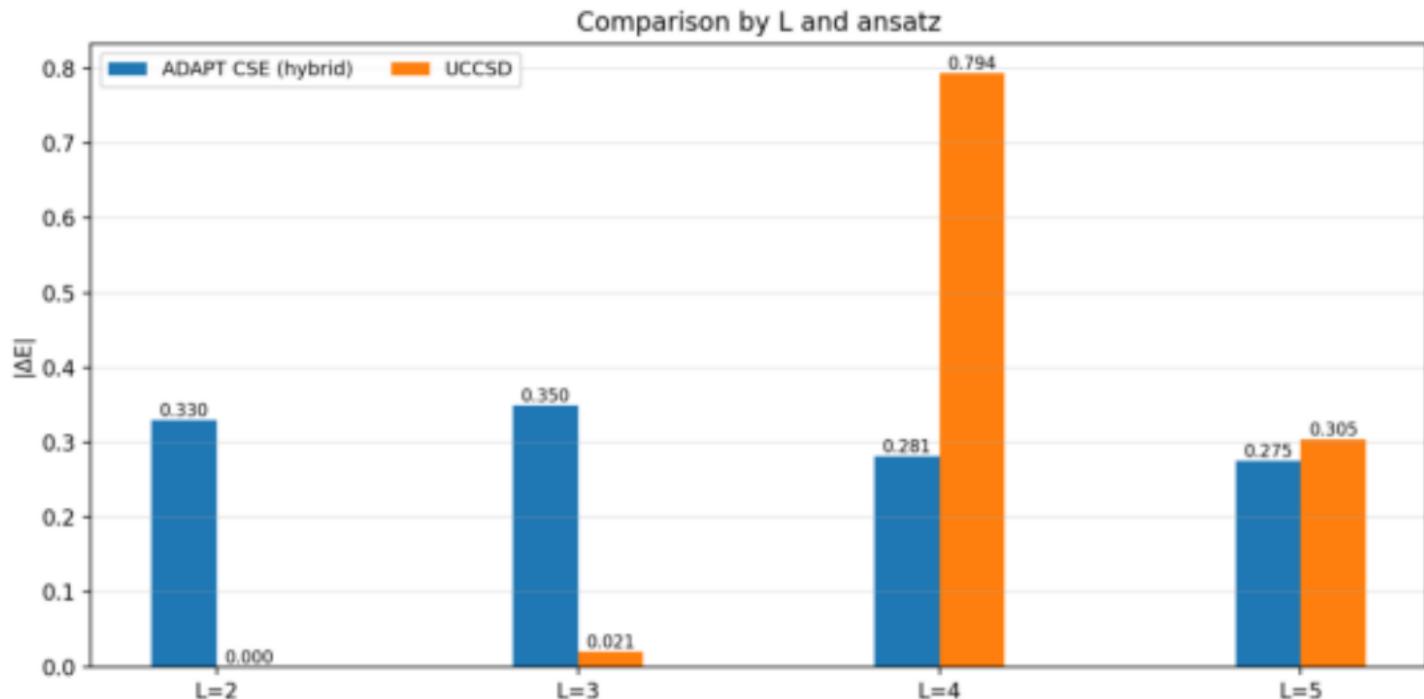
runs/compare\_vqe/compare\_bar\_abs\_L2\_L3\_L4\_L5\_L6.png



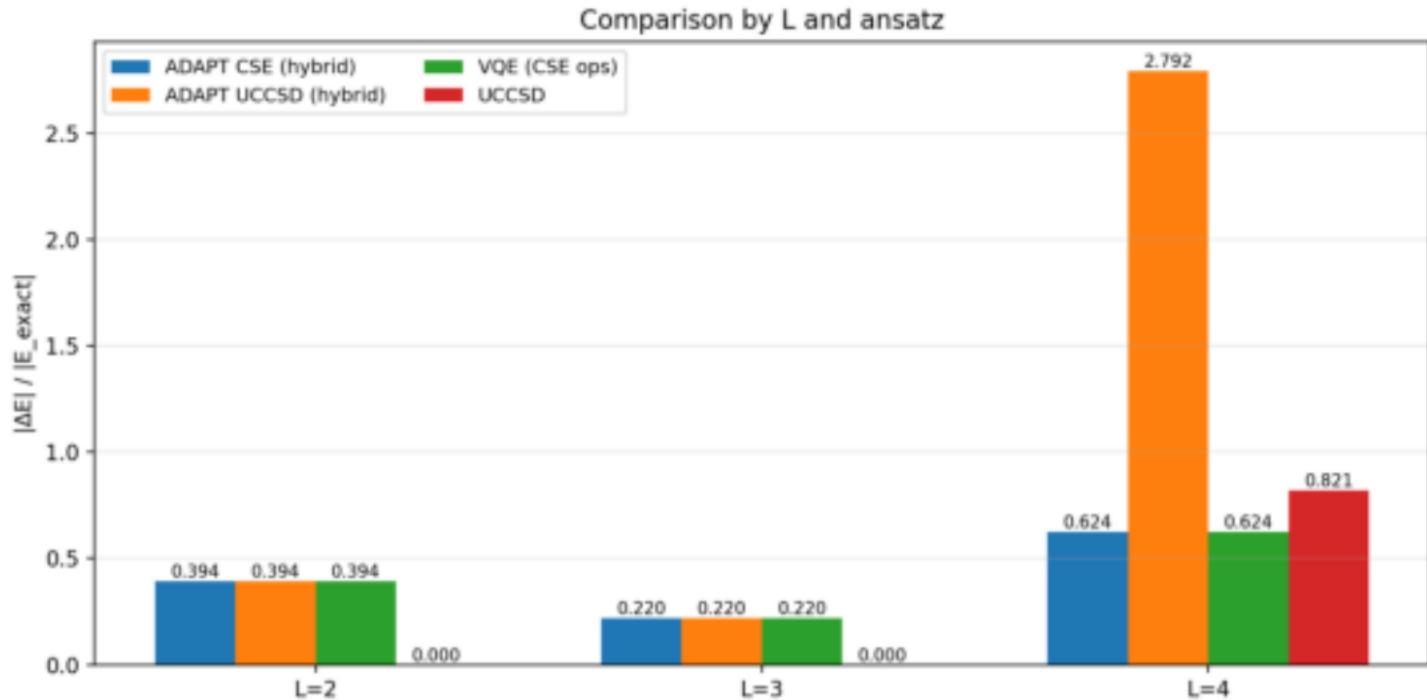
runs/compare\_vqe/compare\_bar\_abs\_L2\_L3\_L5.png



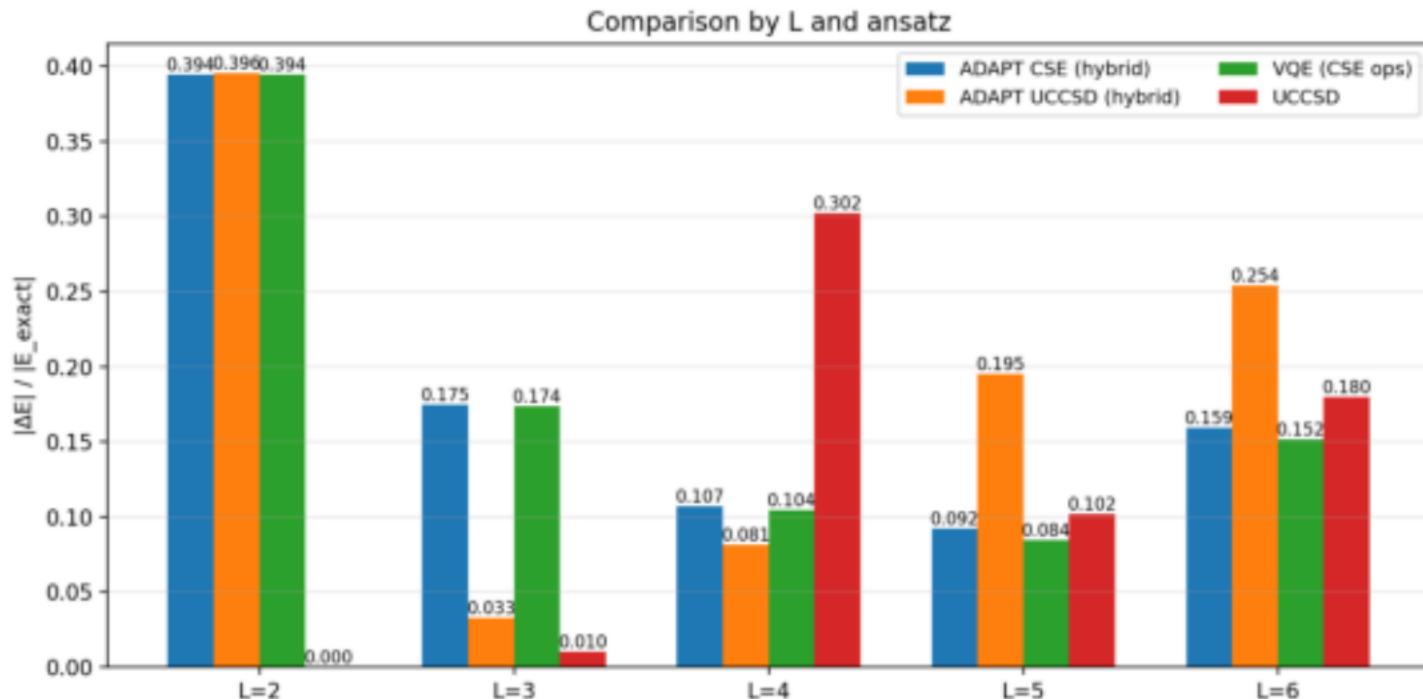
runs/compare\_vqe/compare\_bar\_abs\_L2\_L5.png



runs/compare\_vqe/compare\_bar\_rel\_L2\_L3\_L4.png

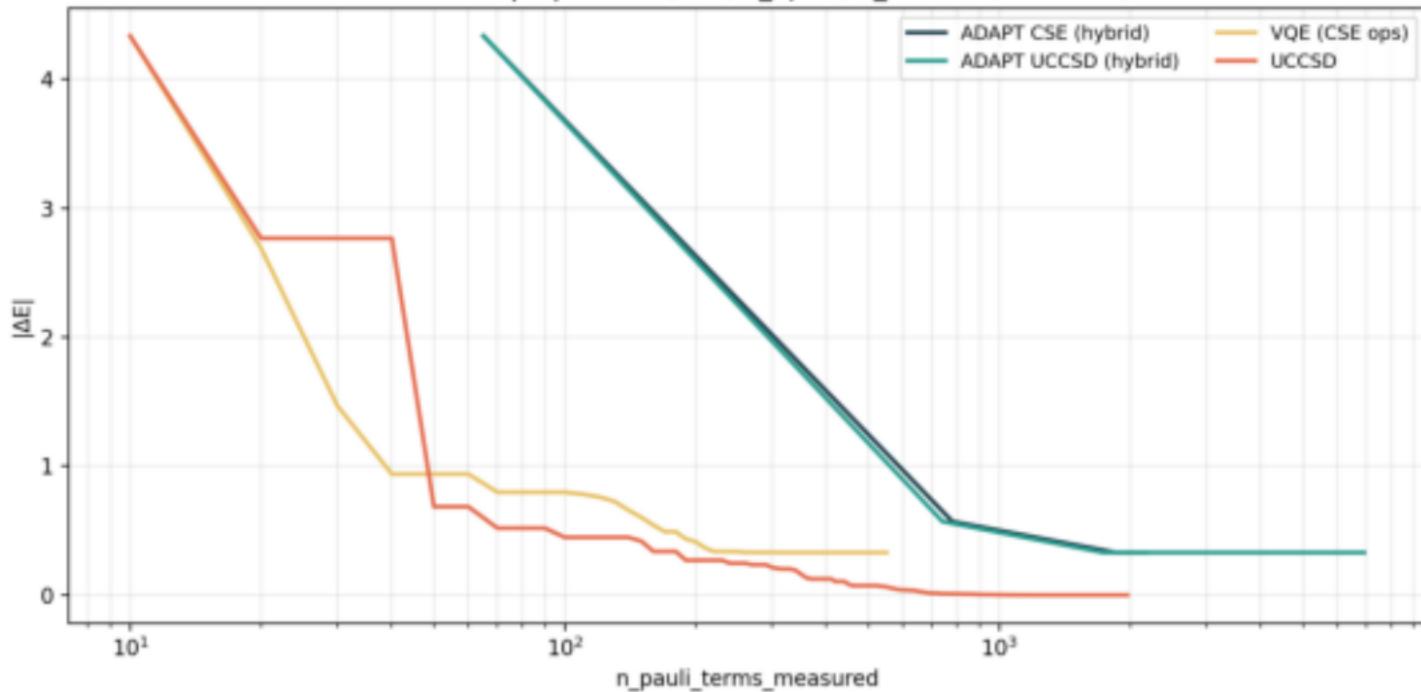


runs/compare\_vqe/compare\_bar\_rel\_L2\_L3\_L4\_L5\_L6.png



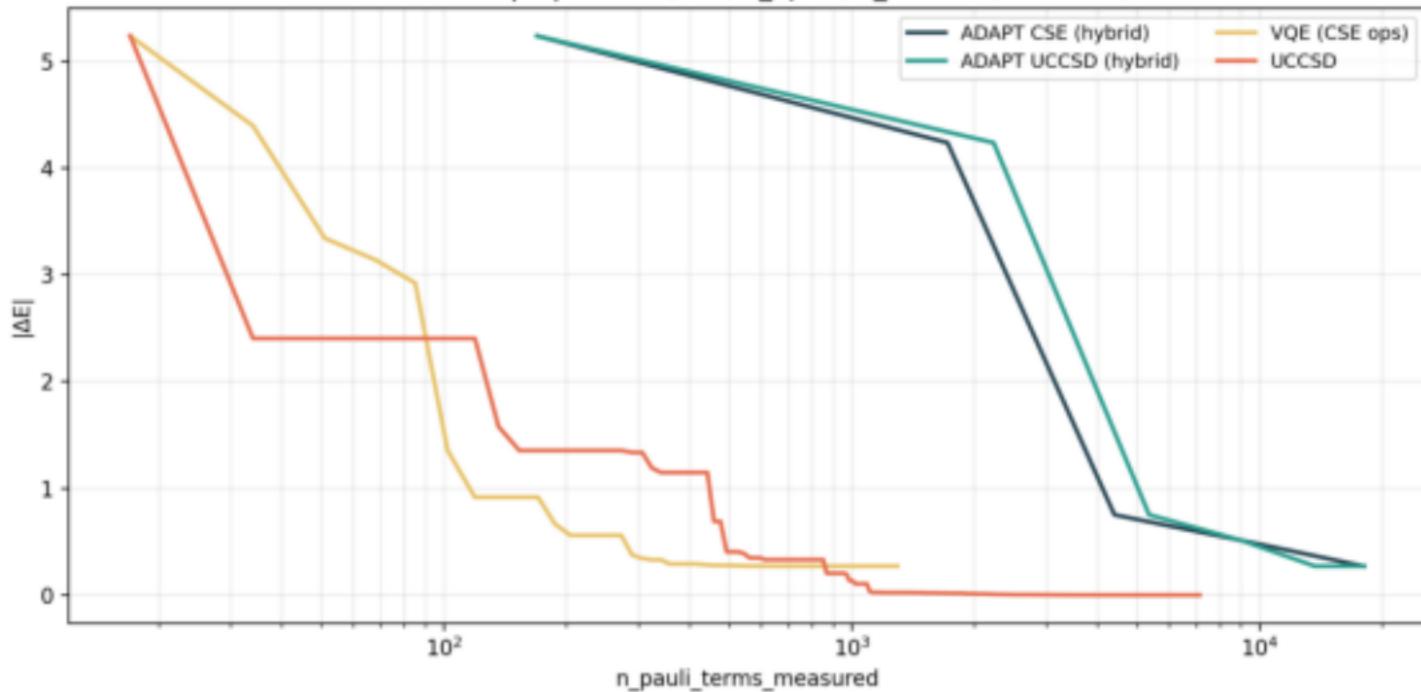
runs/compare\_vqe/cost\_curve\_abs\_delta\_e\_vs\_n\_pauli\_terms\_measured\_L2\_Nup1\_Ndown1.png

Best-so-far  $|\Delta E|$  vs cost ( $L=2$ ,  $n_{\text{up}}=1$ ,  $n_{\text{down}}=1$ ,  $Sz=+0.0$ )

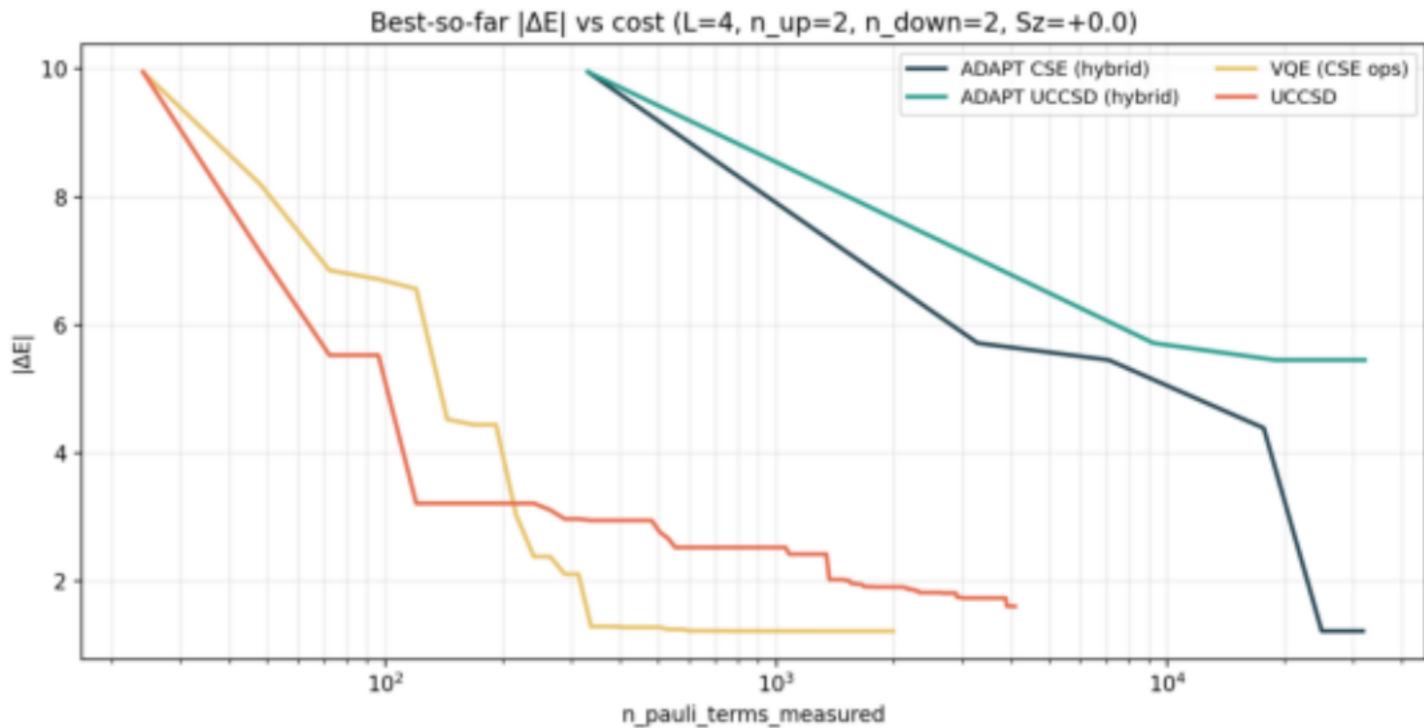


runs/compare\_vqe/cost\_curve\_abs\_delta\_e\_vs\_n\_pauli\_terms\_measured\_L3\_Nup2\_Ndown1.png

Best-so-far  $|\Delta E|$  vs cost ( $L=3$ ,  $n_{\text{up}}=2$ ,  $n_{\text{down}}=1$ ,  $Sz=+0.5$ )

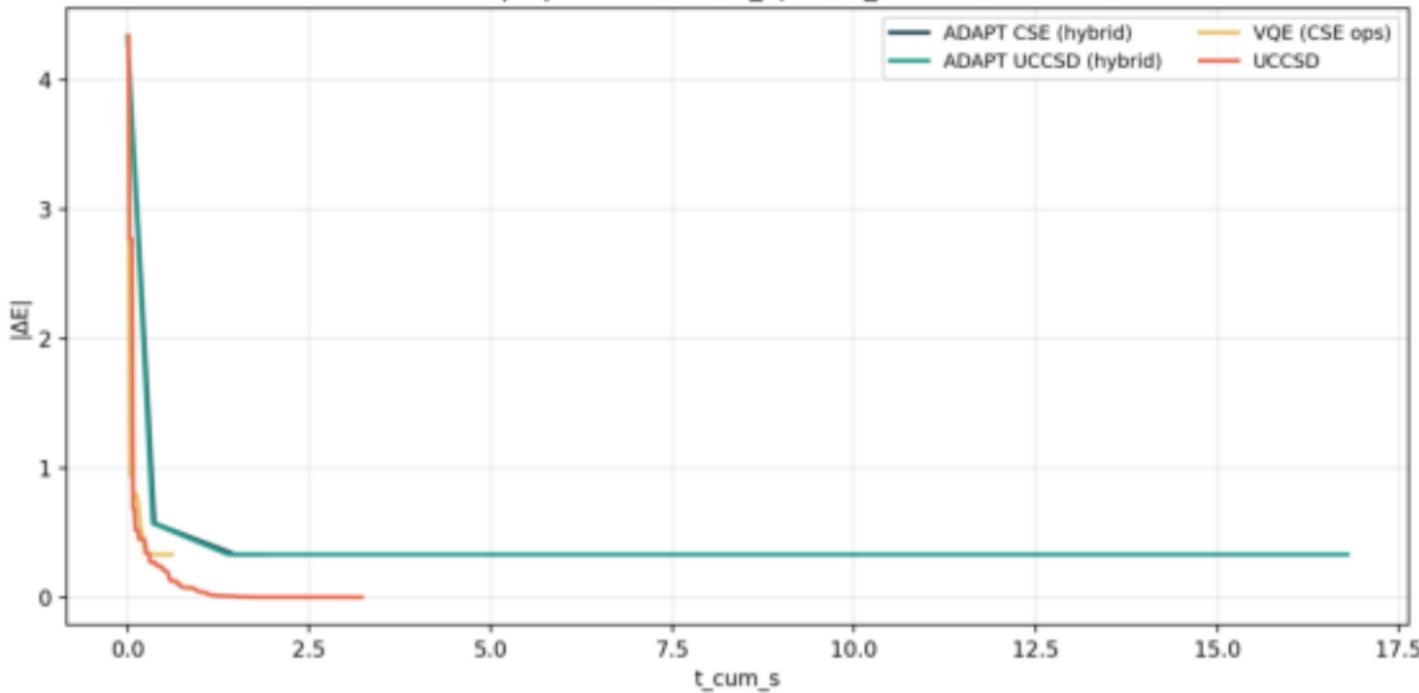


runs/compare\_vqe/cost\_curve\_abs\_delta\_e\_vs\_n\_pauli\_terms\_measured\_L4\_Nup2\_Ndown2.png



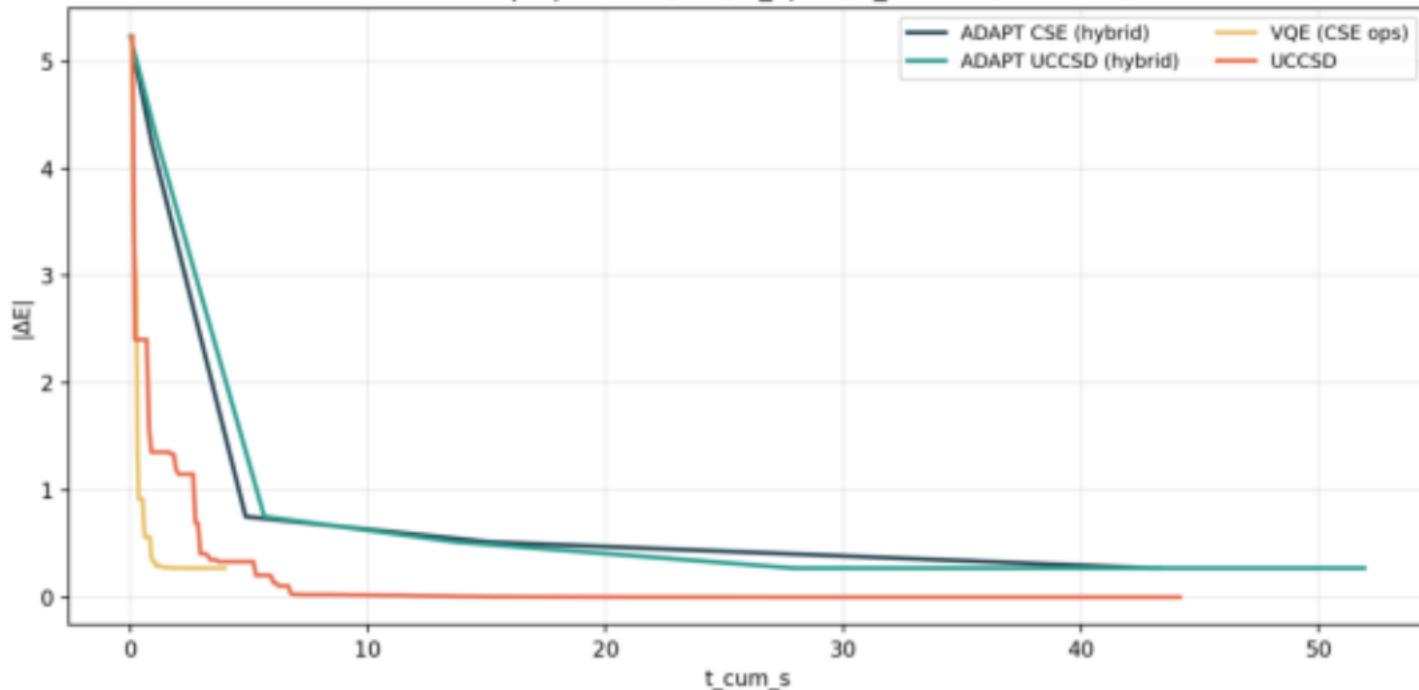
runs/compare\_vqe/cost\_curve\_abs\_delta\_e\_vs\_t\_cum\_s\_L2\_Nup1\_Ndown1.png

Best-so-far  $|\Delta E|$  vs cost ( $L=2$ ,  $n_{\text{up}}=1$ ,  $n_{\text{down}}=1$ ,  $Sz=+0.0$ )



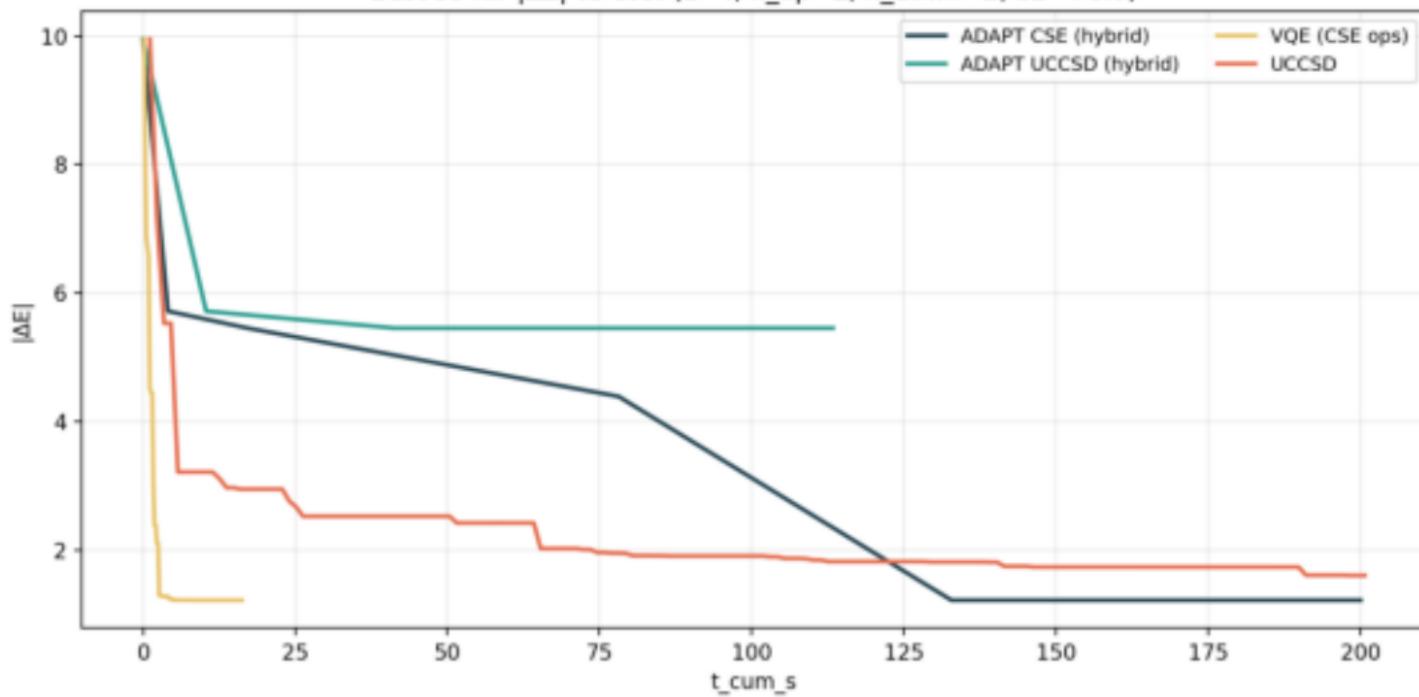
runs/compare\_vqe/cost\_curve\_abs\_delta\_e\_vs\_t\_cum\_s\_L3\_Nup2\_Ndown1.png

Best-so-far  $|\Delta E|$  vs cost ( $L=3$ ,  $n_{\text{up}}=2$ ,  $n_{\text{down}}=1$ ,  $Sz=+0.5$ )



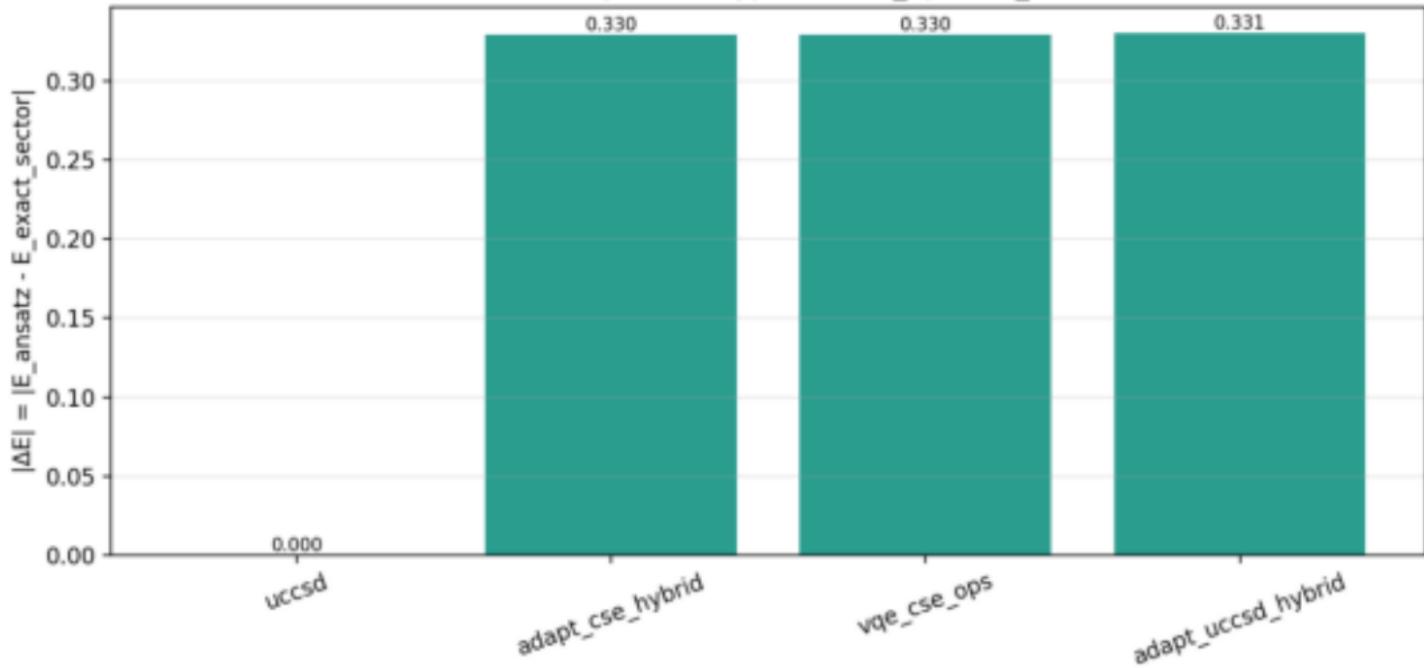
runs/compare\_vqe/cost\_curve\_abs\_delta\_e\_vs\_t\_cum\_s\_L4\_Nup2\_Ndown2.png

Best-so-far  $|\Delta E|$  vs cost ( $L=4$ ,  $n_{\text{up}}=2$ ,  $n_{\text{down}}=2$ ,  $Sz=+0.0$ )



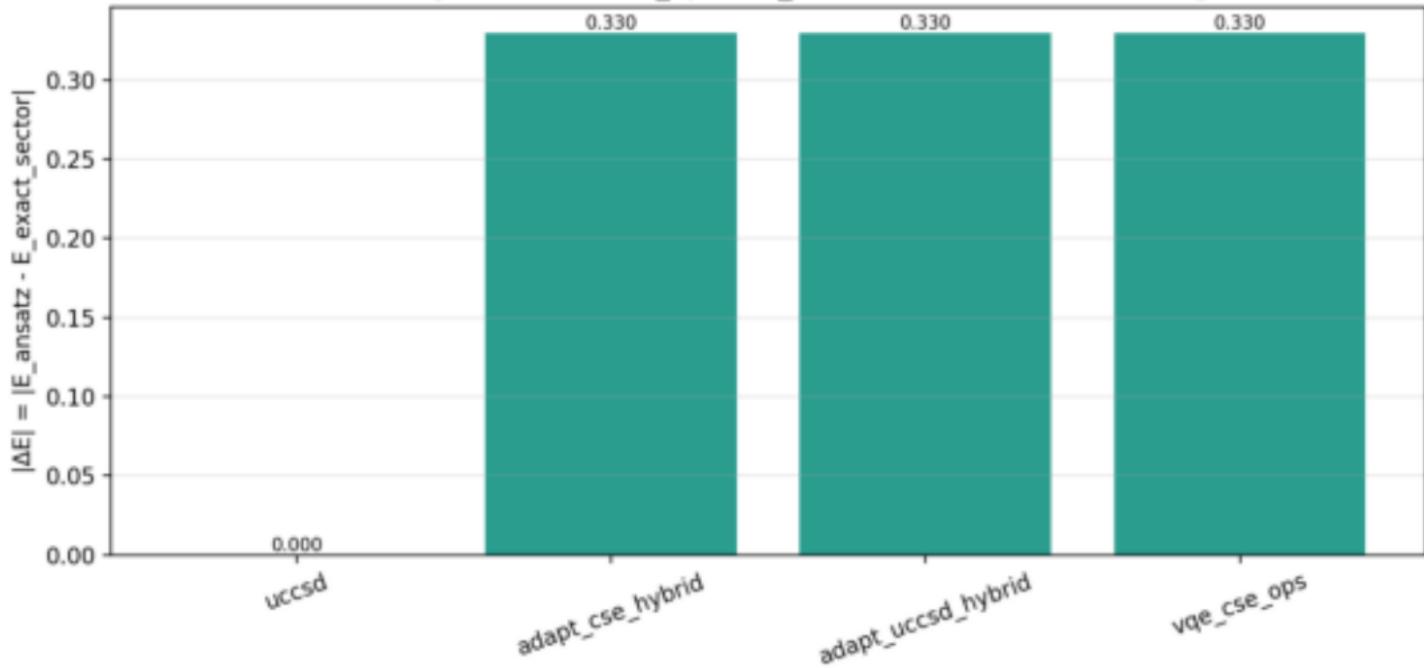
runs/compare\_vqe/delta\_e\_abs\_hist\_L2.png

Absolute error by ansatz type (L=2, n\_up=1, n\_down=1)



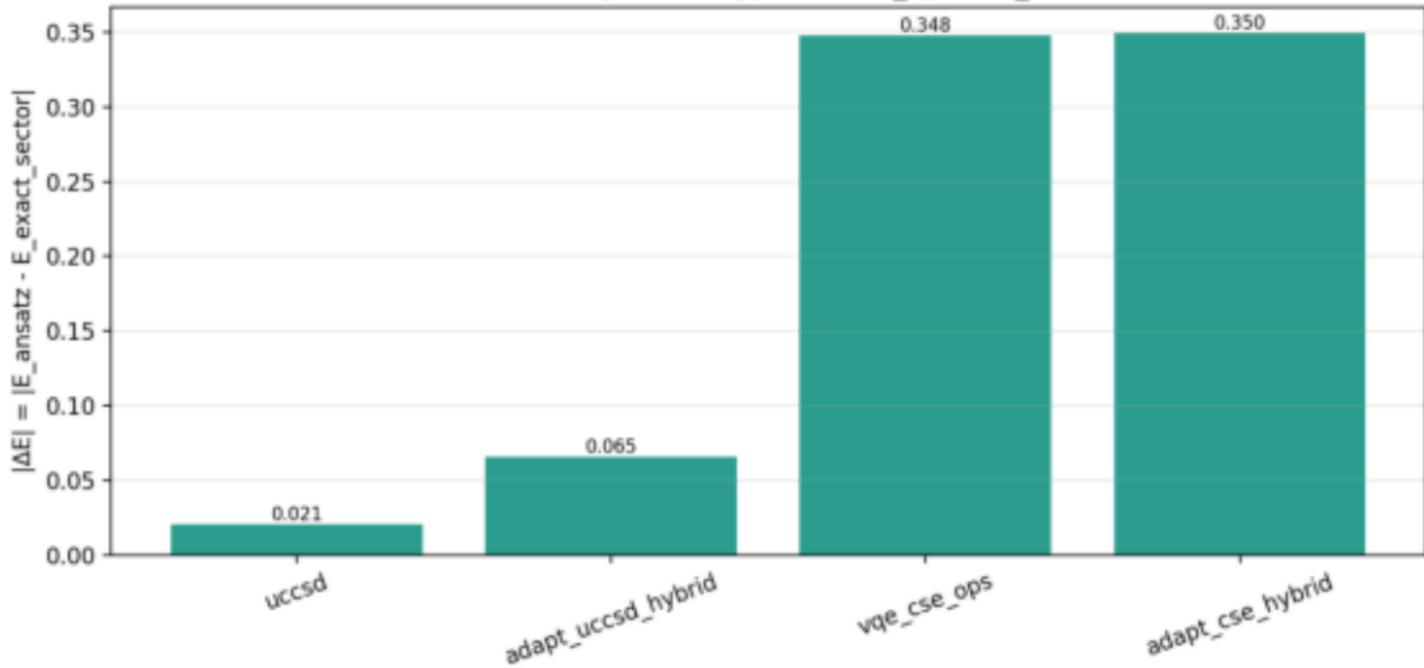
runs/compare\_vqe/delta\_e\_abs\_hist\_L2\_Nup1\_Ndown1.png

Absolute error by ansatz (L=2, n\_up=1, n\_down=1, N=2, Sz=+0.0, filling=1.000)



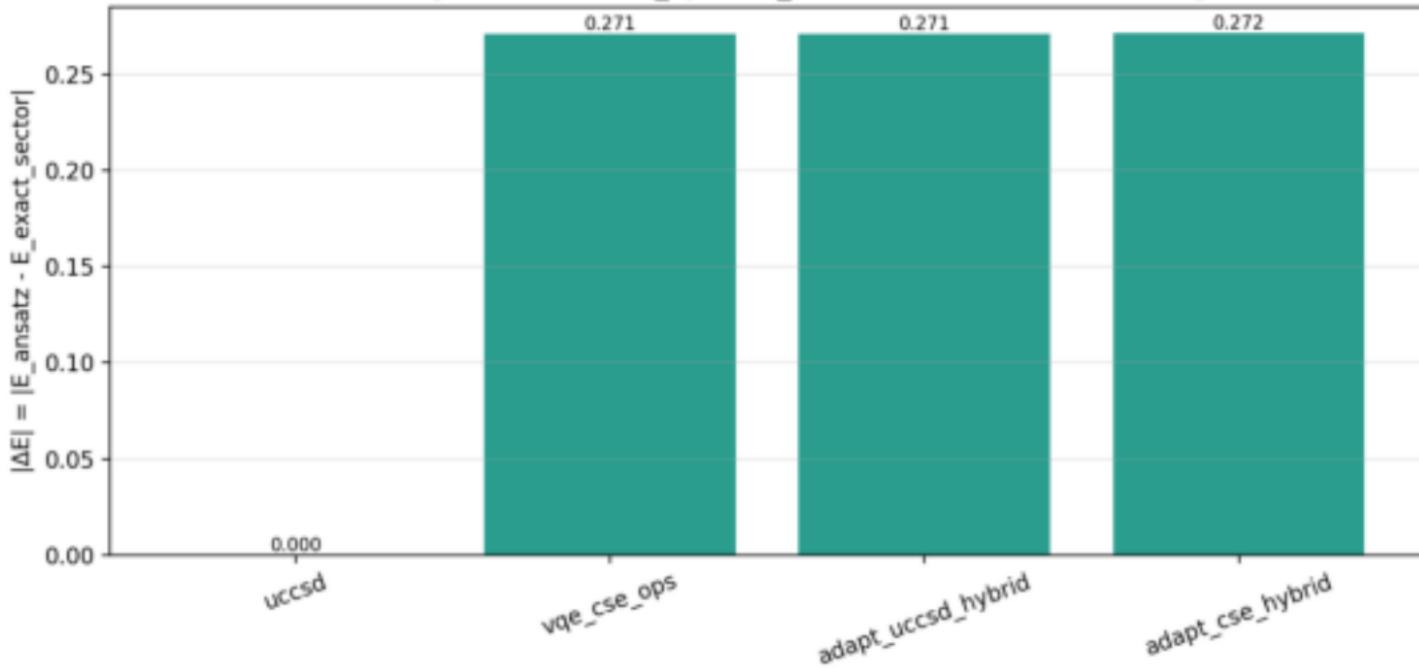
runs/compare\_vqe/delta\_e\_abs\_hist\_L3.png

Absolute error by ansatz type (L=3, n\_up=1, n\_down=1)



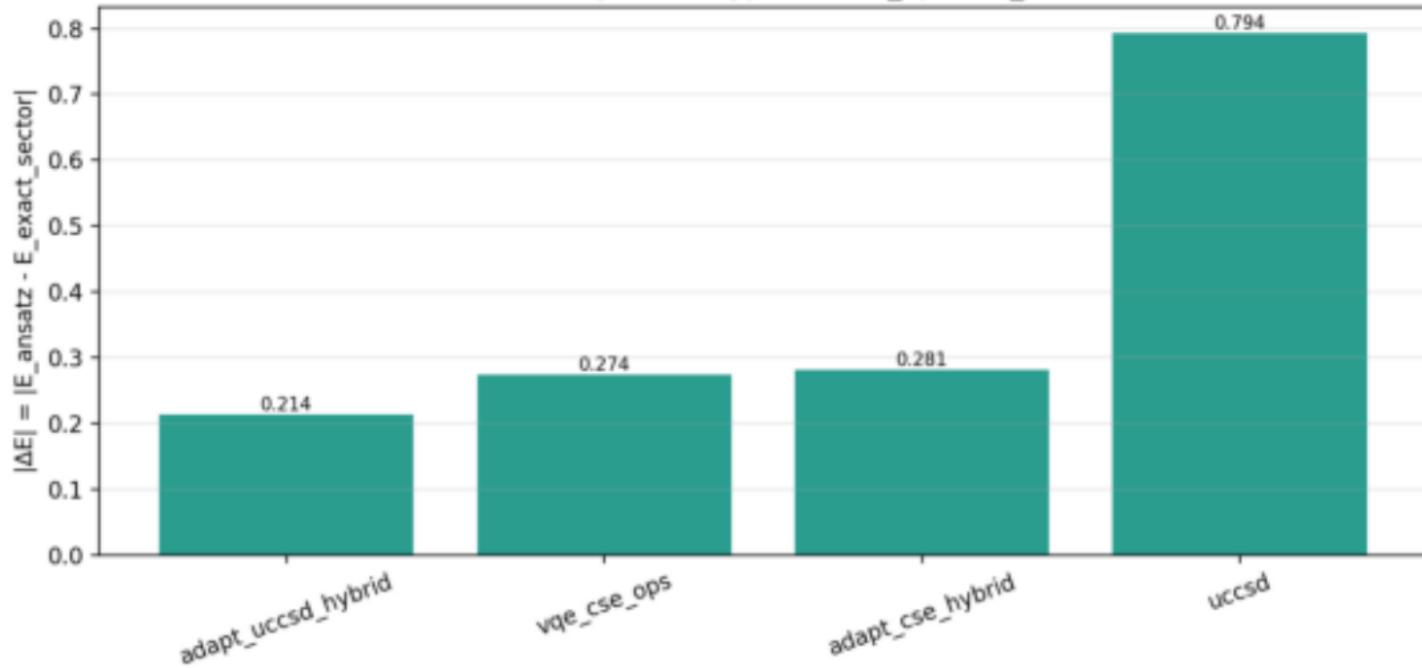
runs/compare\_vqe/delta\_e\_abs\_hist\_L3\_Nup2\_Ndown1.png

Absolute error by ansatz (L=3, n\_up=2, n\_down=1, N=3, Sz=+0.5, filling=1.000)



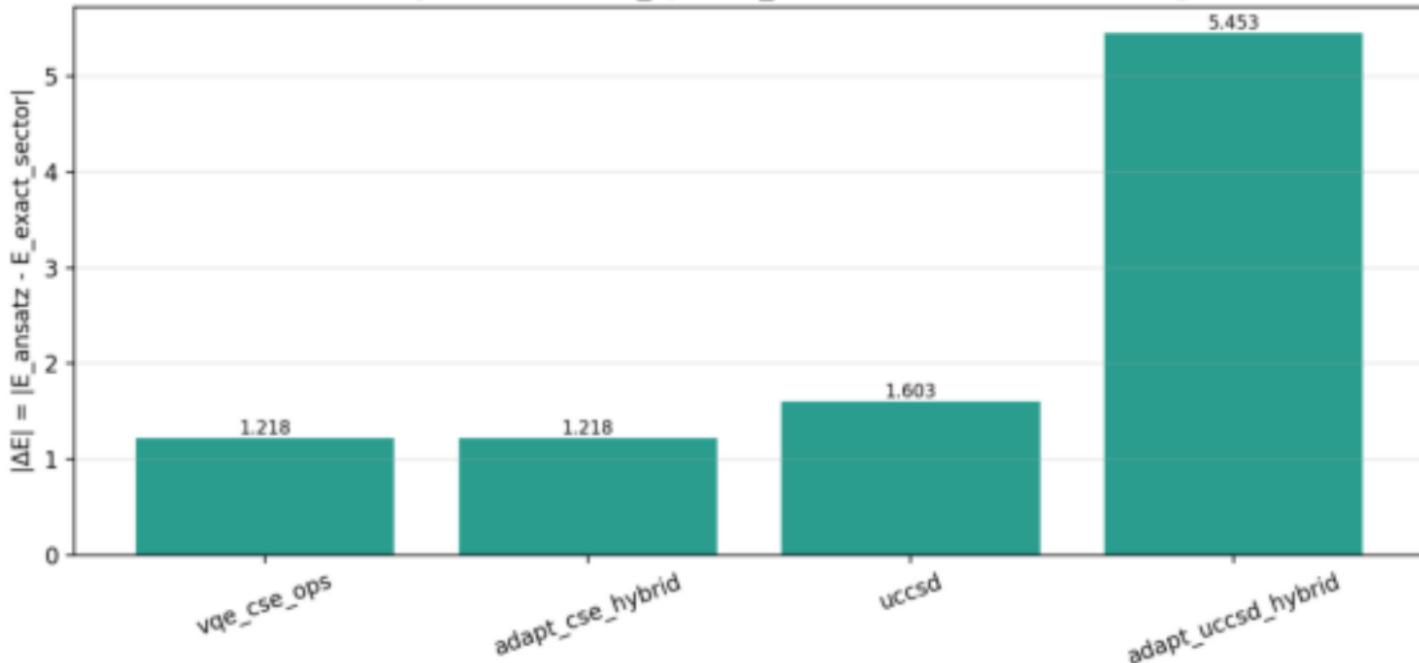
runs/compare\_vqe/delta\_e\_abs\_hist\_L4.png

Absolute error by ansatz type (L=4, n\_up=1, n\_down=1)



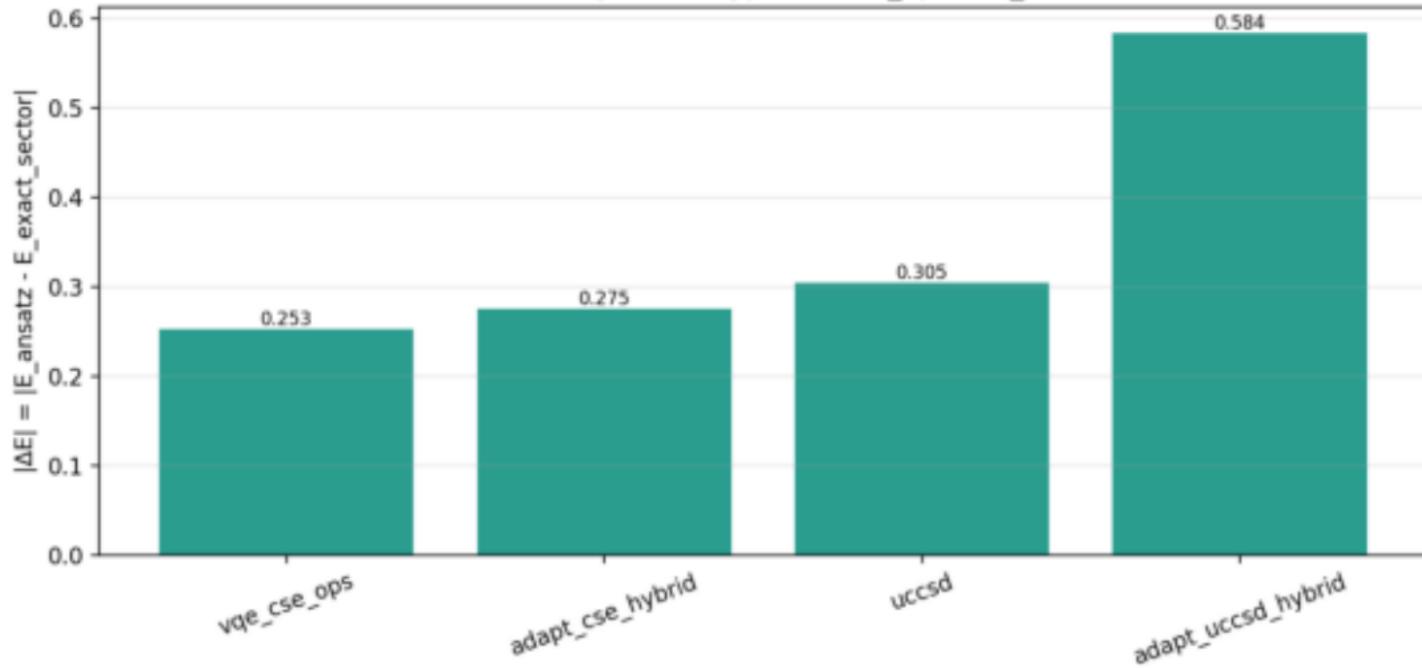
runs/compare\_vqe/delta\_e\_abs\_hist\_L4\_Nup2\_Ndown2.png

Absolute error by ansatz (L=4, n\_up=2, n\_down=2, N=4, Sz=+0.0, filling=1.000)



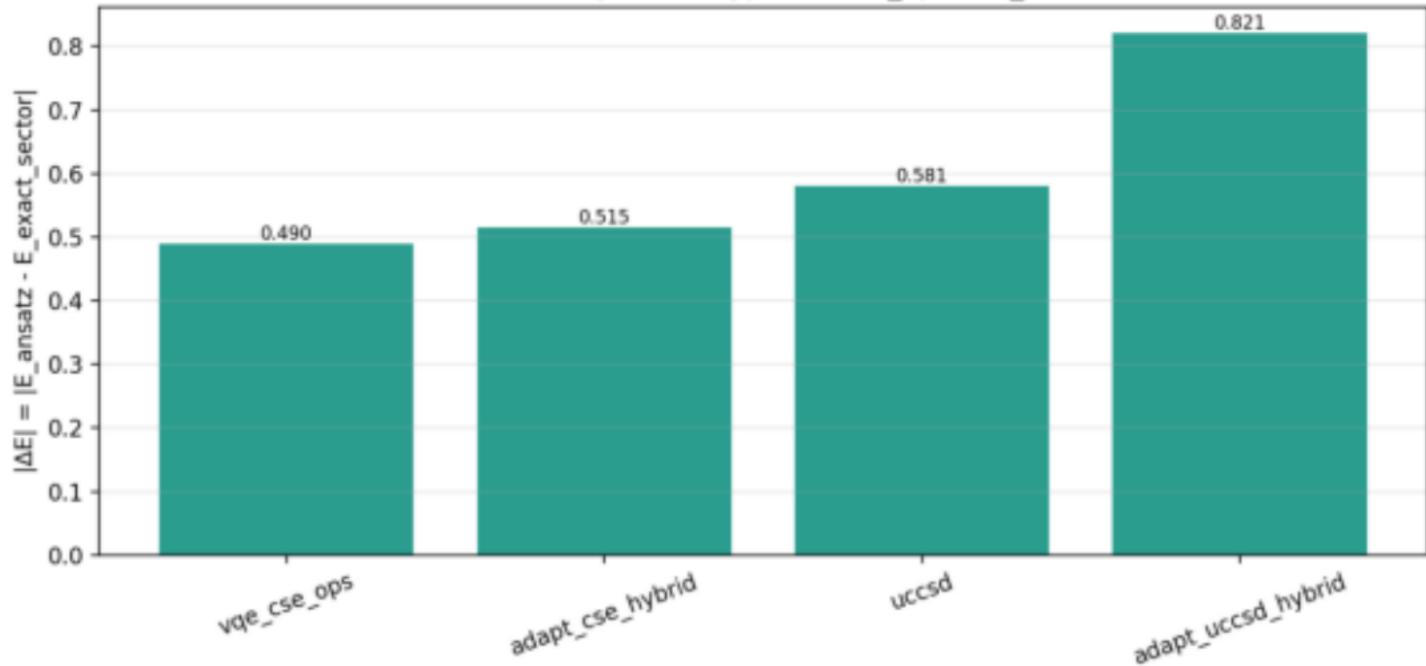
runs/compare\_vqe/delta\_e\_abs\_hist\_L5.png

Absolute error by ansatz type (L=5, n\_up=1, n\_down=1)



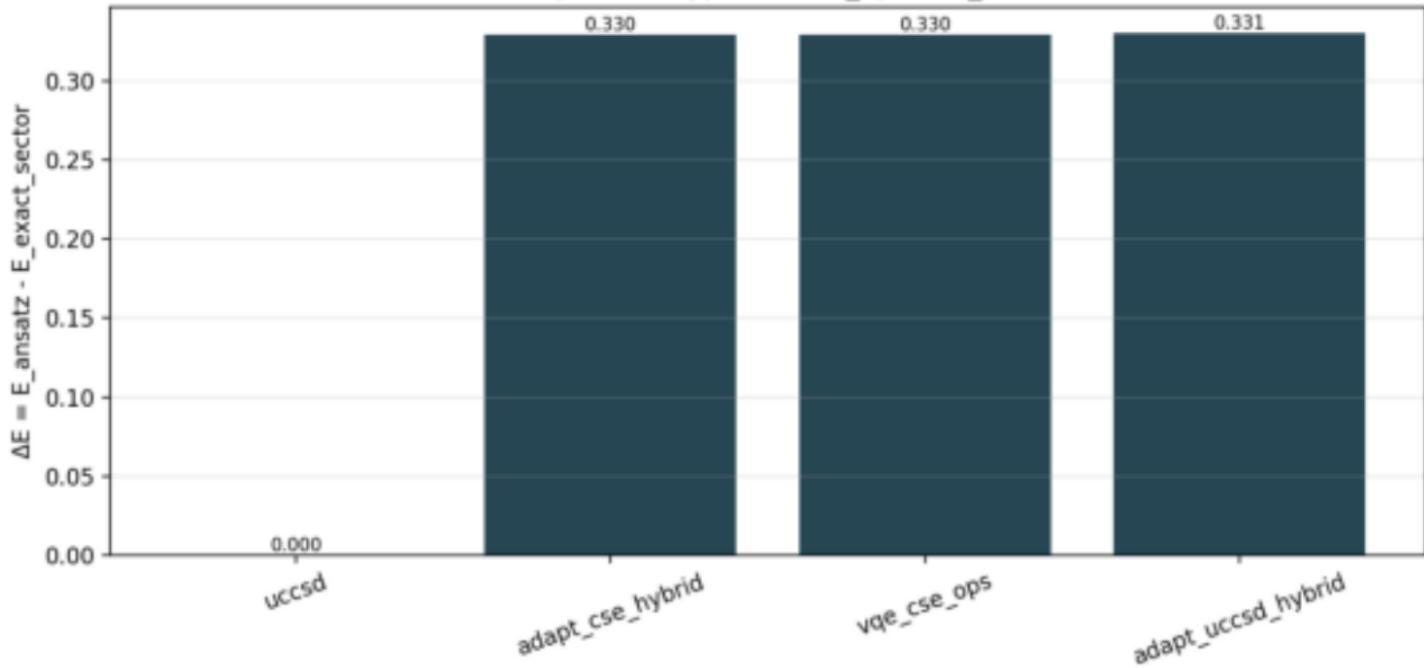
runs/compare\_vqe/delta\_e\_abs\_hist\_L6.png

Absolute error by ansatz type (L=6, n\_up=1, n\_down=1)

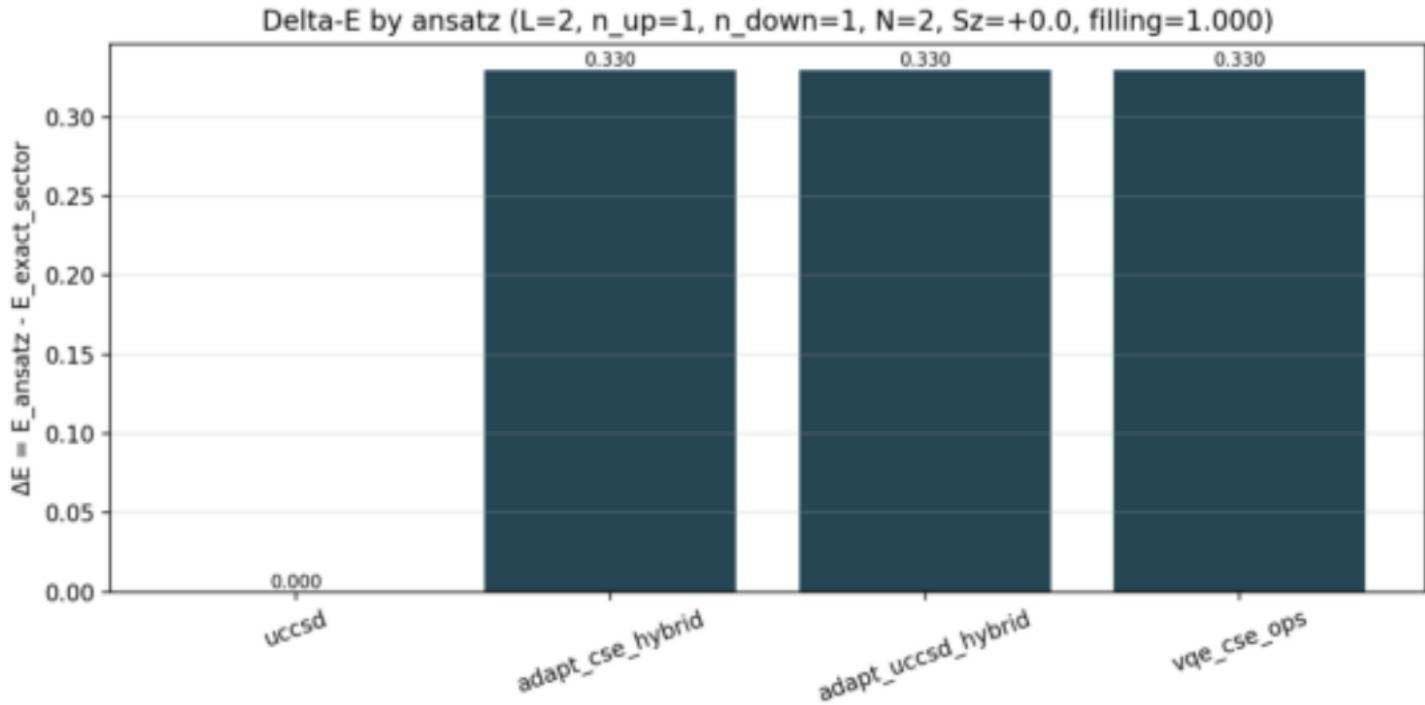


runs/compare\_vqe/delta\_e\_hist\_L2.png

Delta-E by ansatz type (L=2, n\_up=1, n\_down=1)

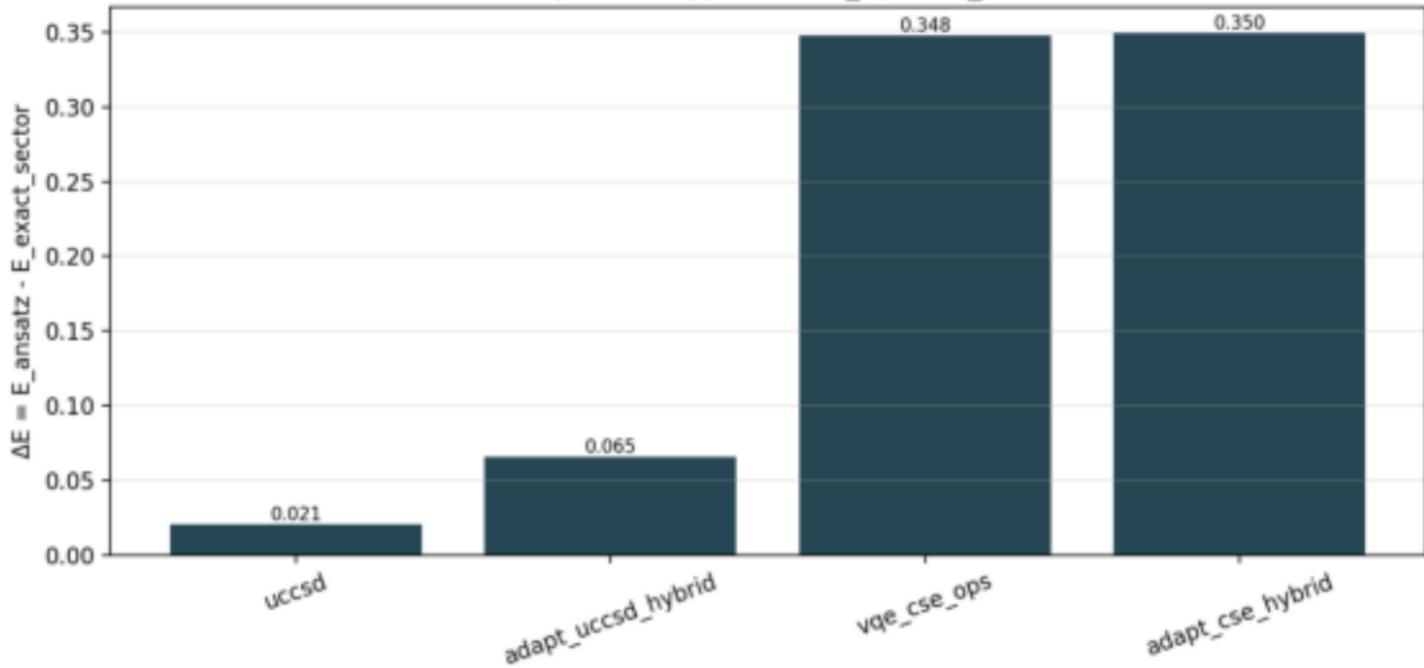


runs/compare\_vqe/delta\_e\_hist\_L2\_Nup1\_Ndown1.png

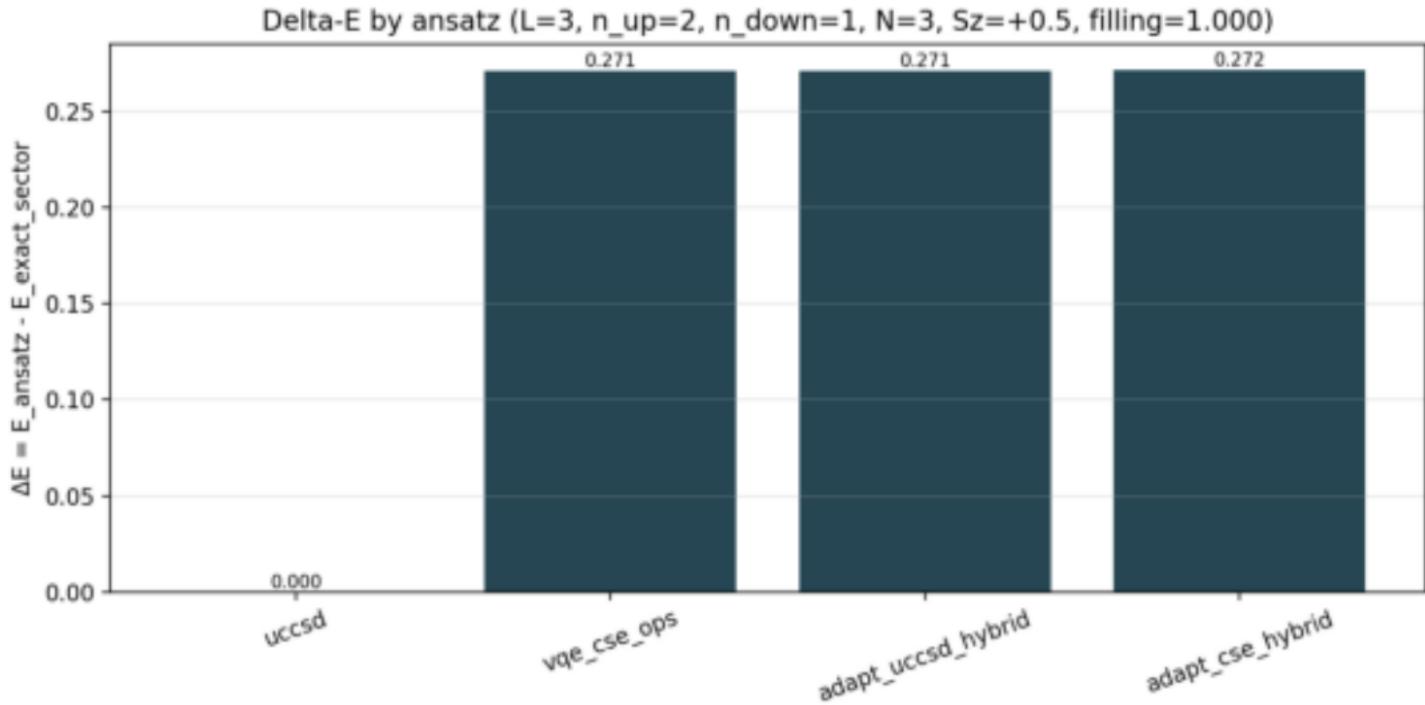


runs/compare\_vqe/delta\_e\_hist\_L3.png

Delta-E by ansatz type (L=3, n\_up=1, n\_down=1)

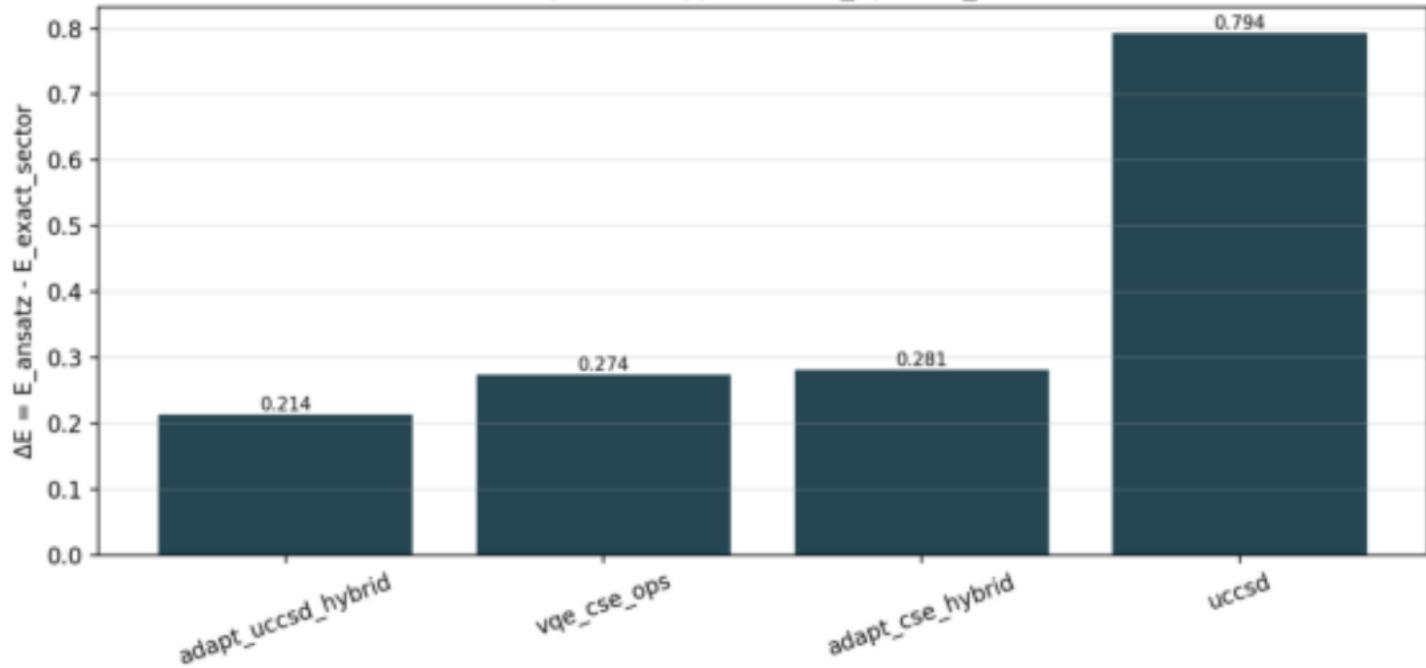


runs/compare\_vqe/delta\_e\_hist\_L3\_Nup2\_Ndown1.png



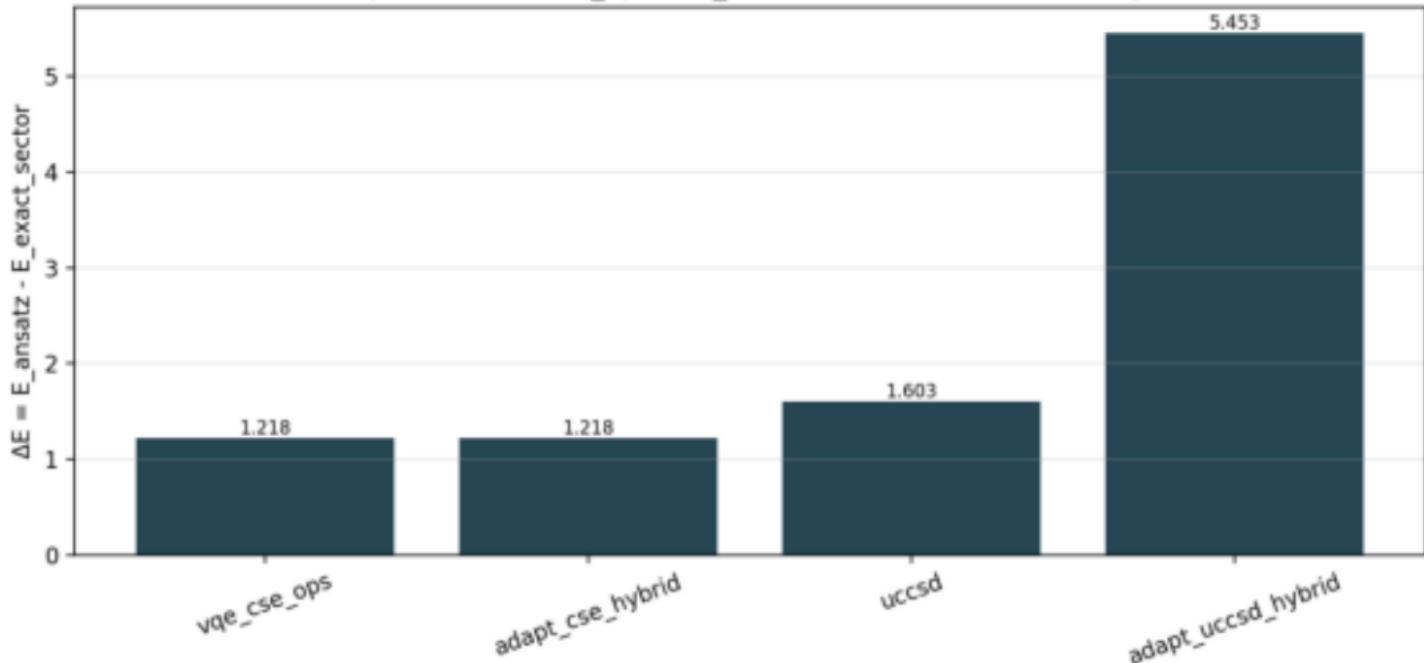
runs/compare\_vqe/delta\_e\_hist\_L4.png

Delta-E by ansatz type (L=4, n\_up=1, n\_down=1)



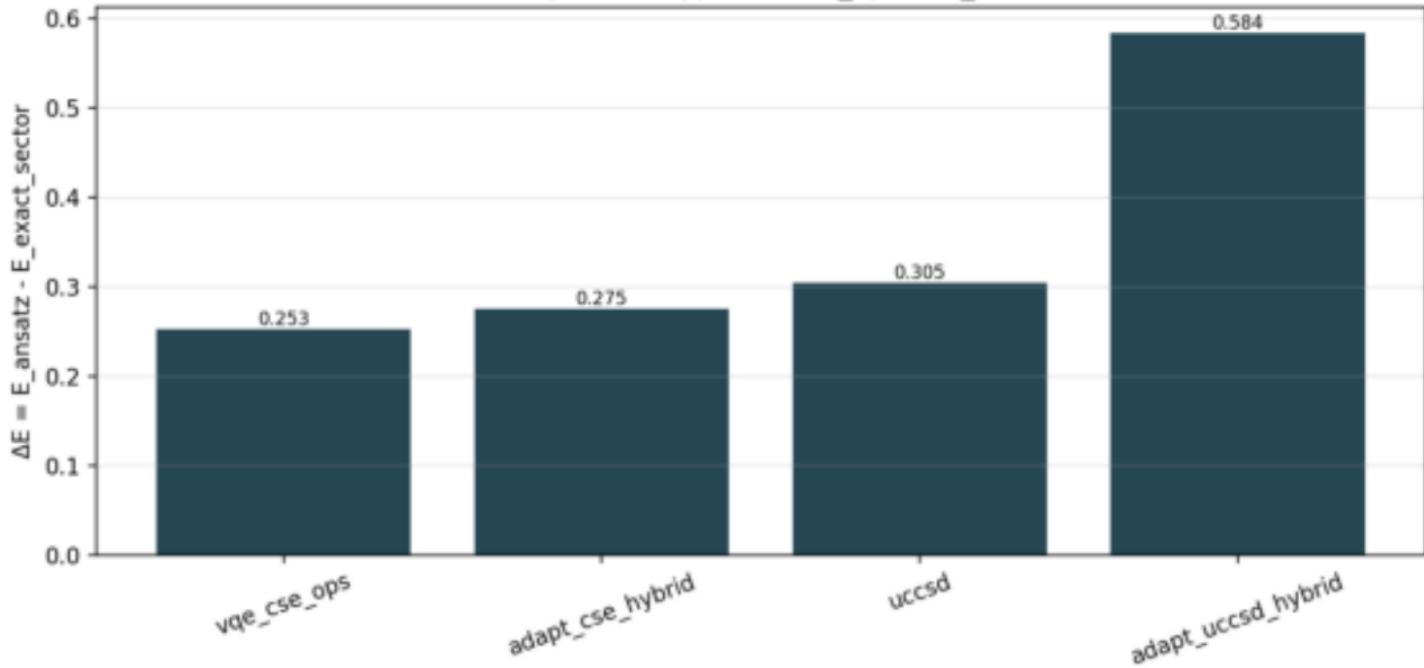
runs/compare\_vqe/delta\_e\_hist\_L4\_Nup2\_Ndown2.png

Delta-E by ansatz (L=4, n\_up=2, n\_down=2, N=4, Sz=+0.0, filling=1.000)



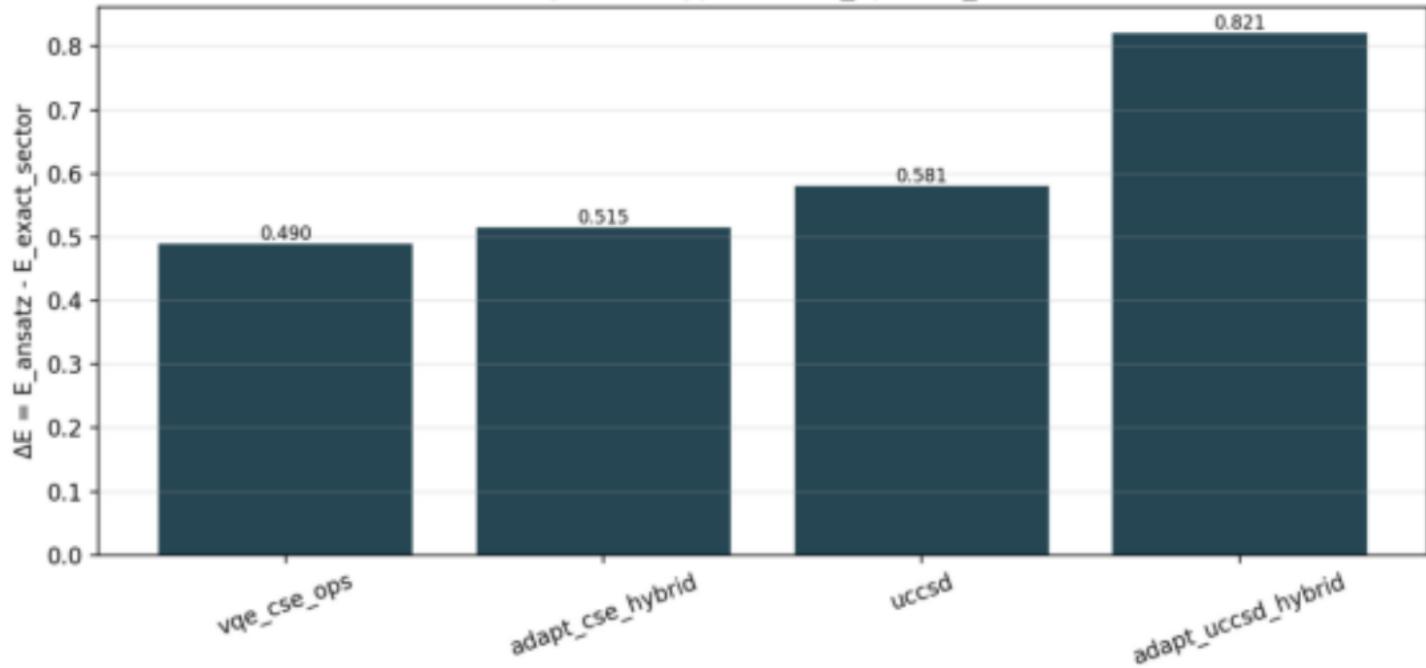
runs/compare\_vqe/delta\_e\_hist\_L5.png

Delta-E by ansatz type (L=5, n\_up=1, n\_down=1)

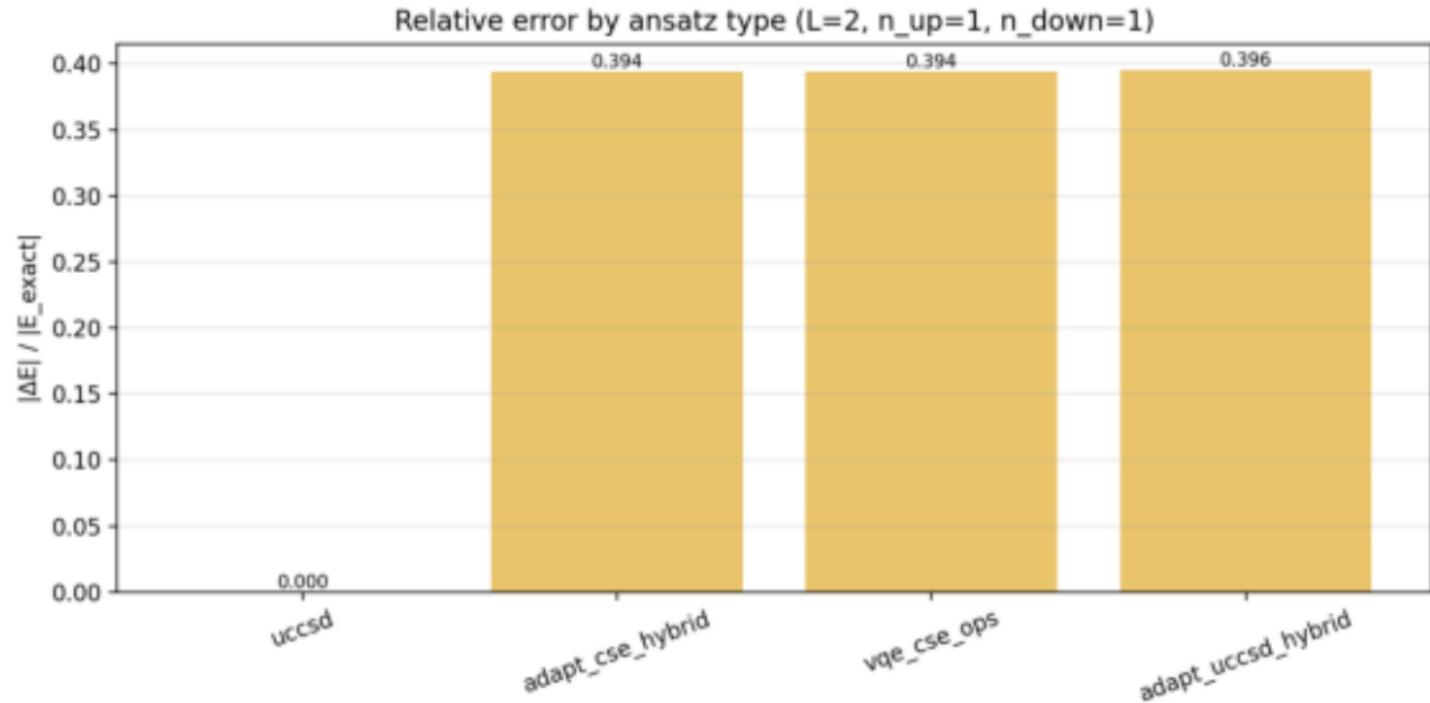


runs/compare\_vqe/delta\_e\_hist\_L6.png

Delta-E by ansatz type (L=6, n\_up=1, n\_down=1)

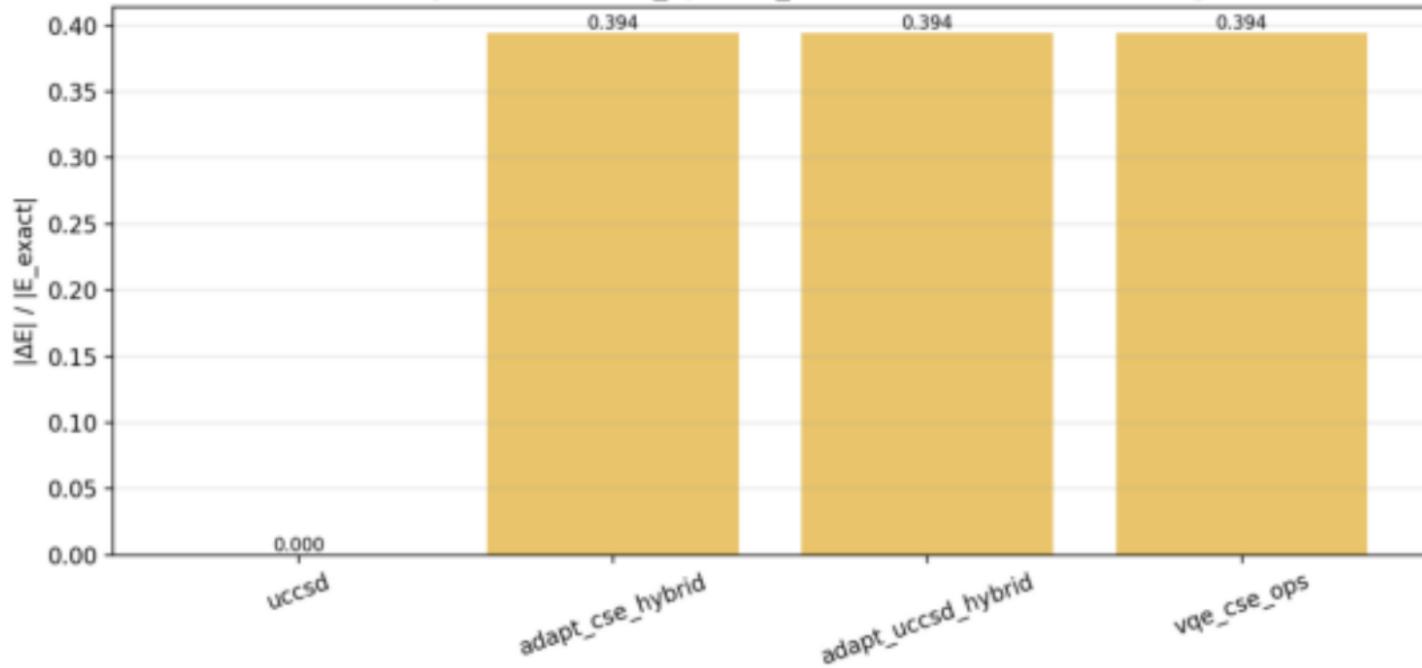


runs/compare\_vqe/delta\_e\_rel\_hist\_L2.png



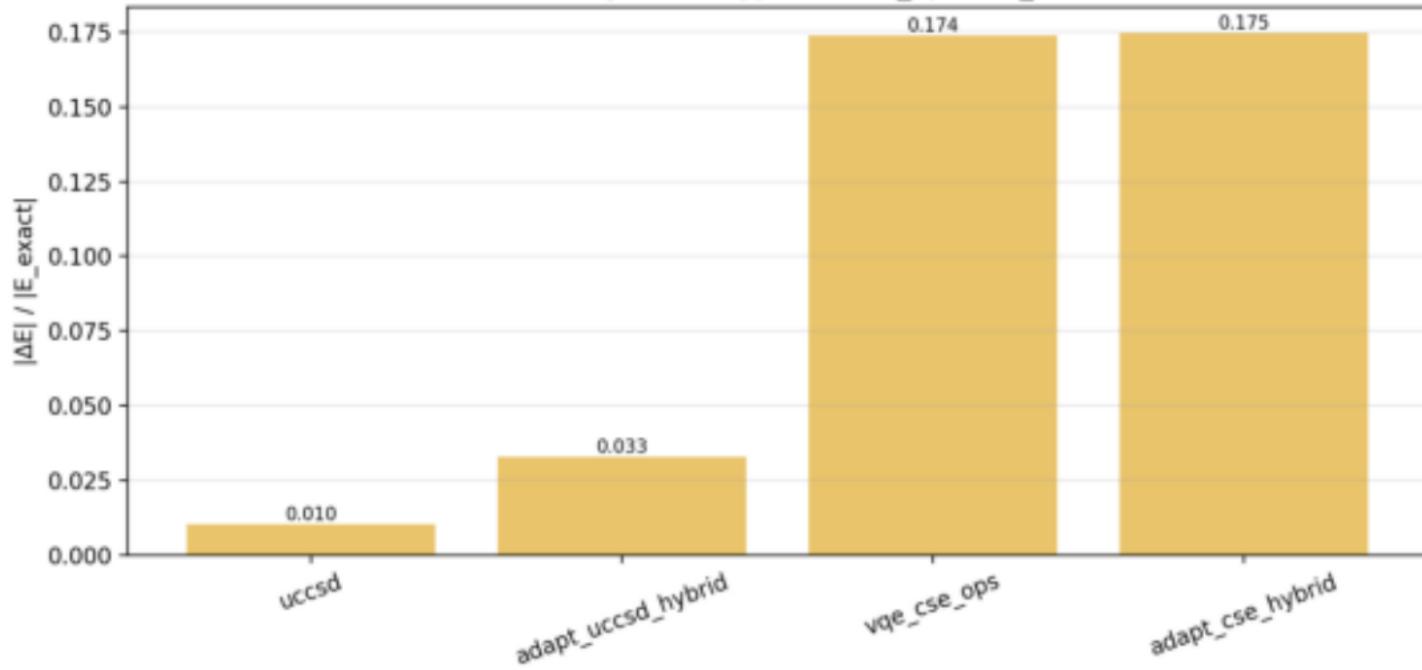
runs/compare\_vqe/delta\_e\_rel\_hist\_L2\_Nup1\_Ndown1.png

Relative error by ansatz (L=2, n\_up=1, n\_down=1, N=2, Sz=+0.0, filling=1.000)



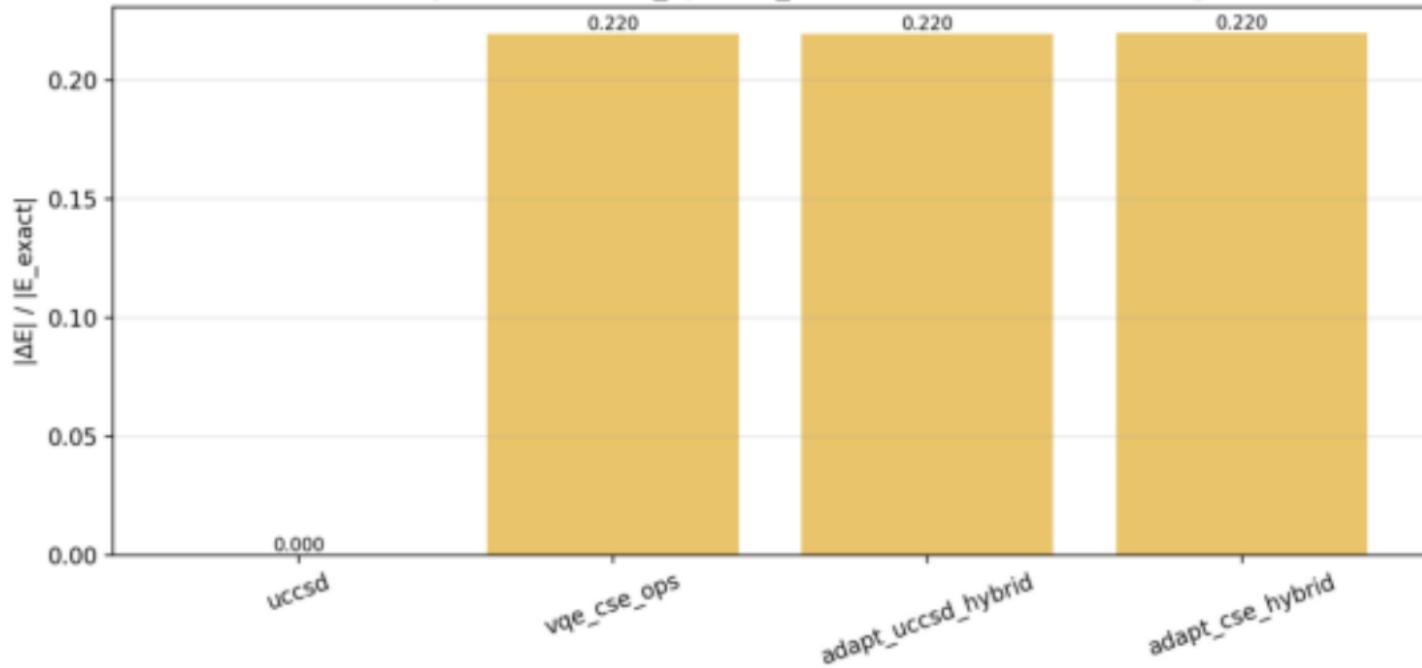
runs/compare\_vqe/delta\_e\_rel\_hist\_L3.png

Relative error by ansatz type (L=3, n\_up=1, n\_down=1)



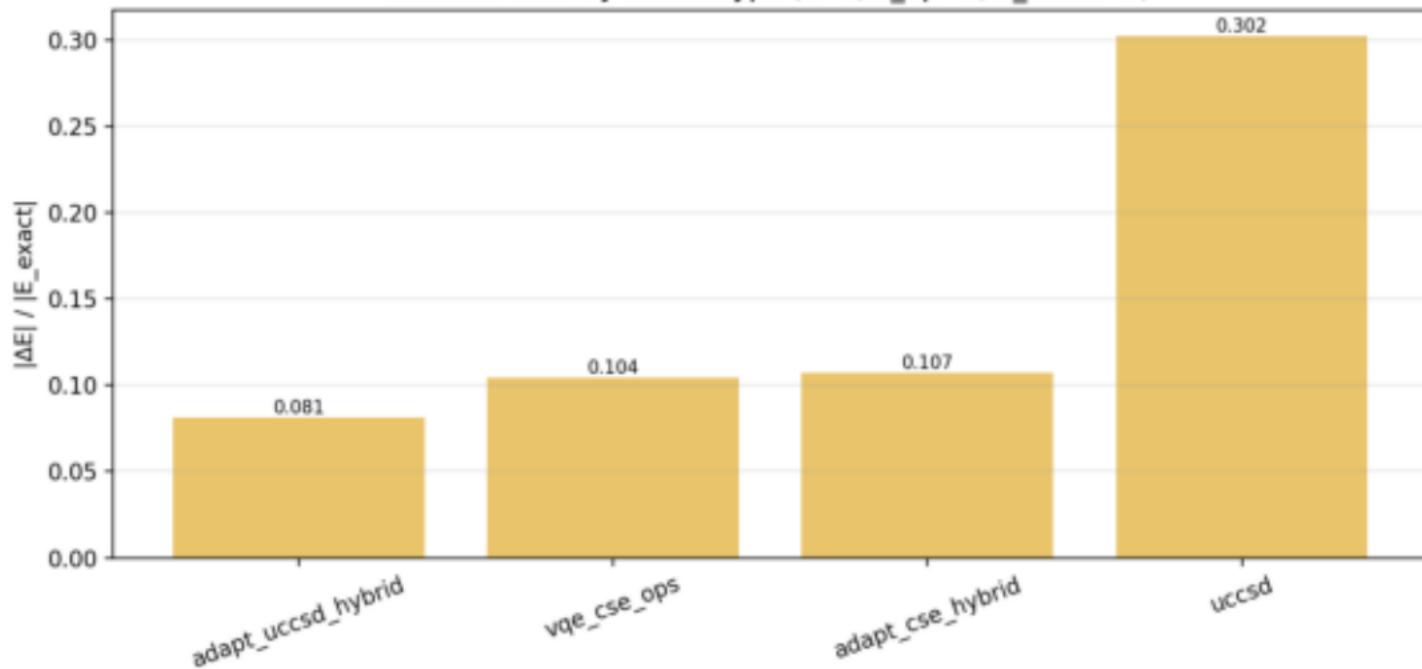
runs/compare\_vqe/delta\_e\_rel\_hist\_L3\_Nup2\_Ndown1.png

Relative error by ansatz (L=3, n\_up=2, n\_down=1, N=3, Sz=+0.5, filling=1.000)



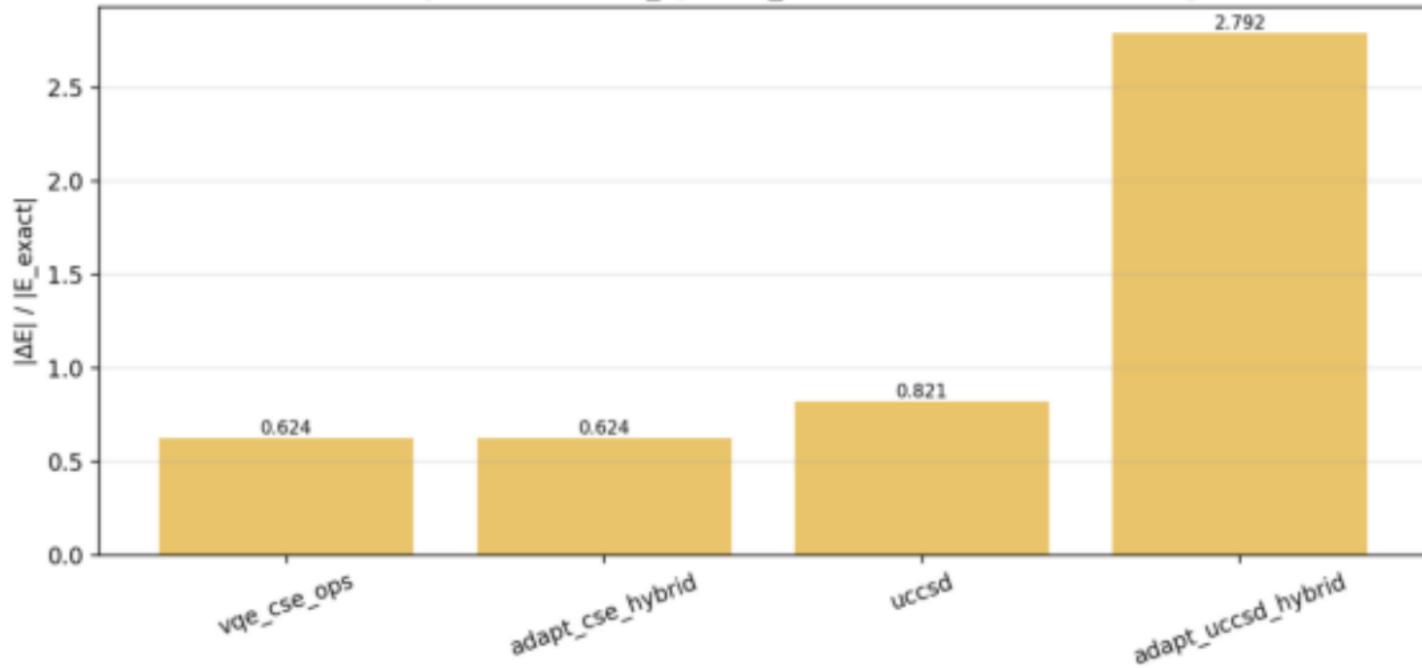
runs/compare\_vqe/delta\_e\_rel\_hist\_L4.png

Relative error by ansatz type (L=4, n\_up=1, n\_down=1)

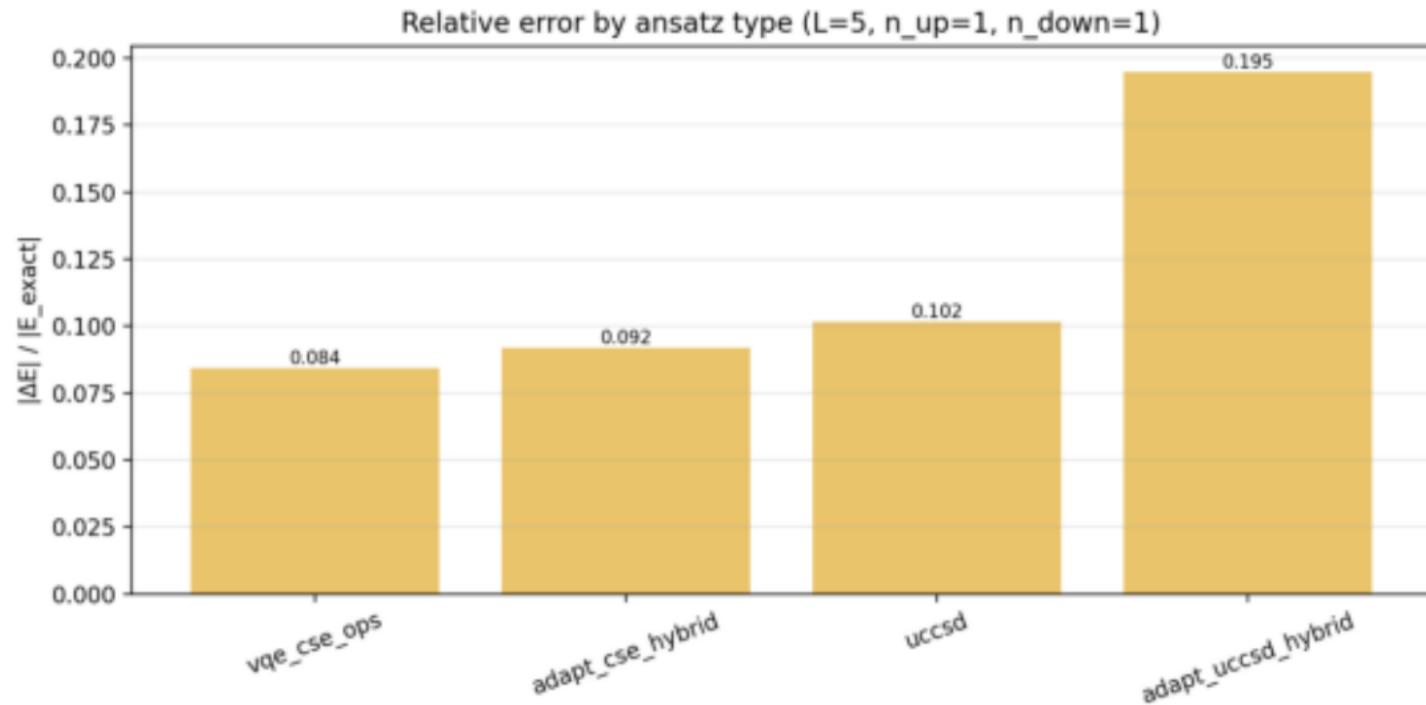


runs/compare\_vqe/delta\_e\_rel\_hist\_L4\_Nup2\_Ndown2.png

Relative error by ansatz (L=4, n\_up=2, n\_down=2, N=4, Sz=+0.0, filling=1.000)

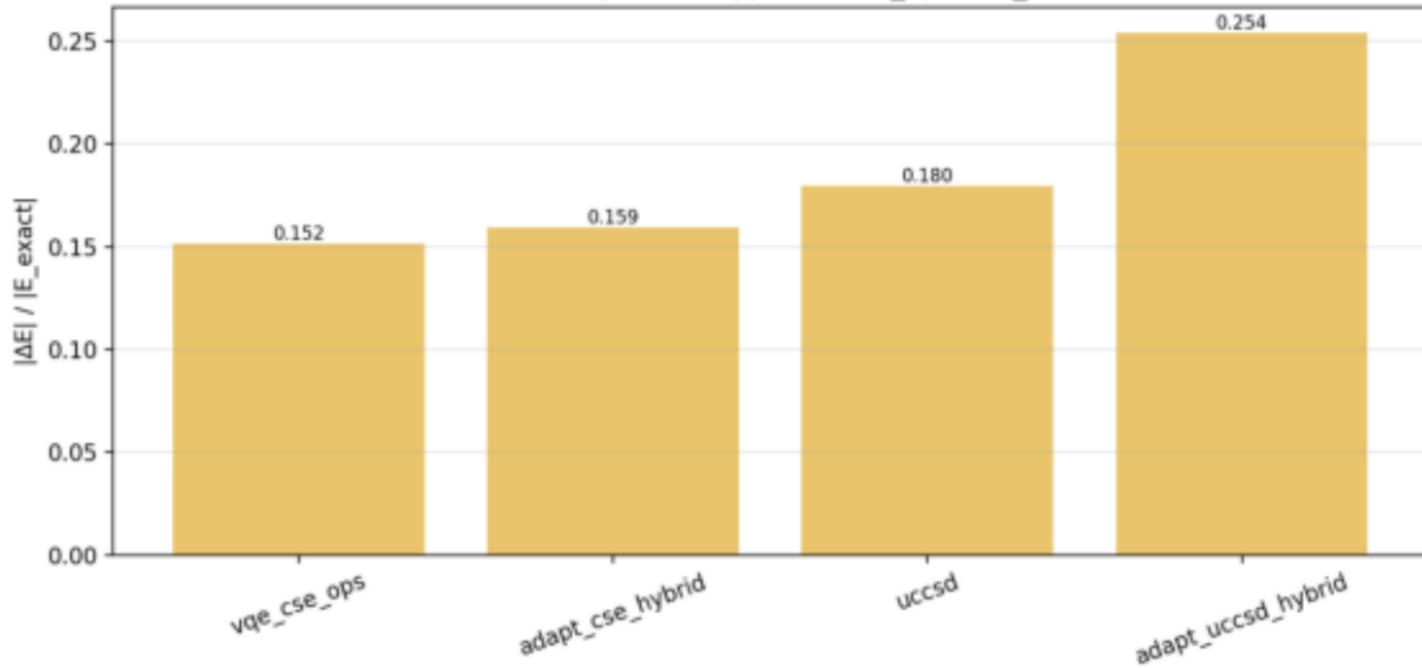


runs/compare\_vqe/delta\_e\_rel\_hist\_L5.png

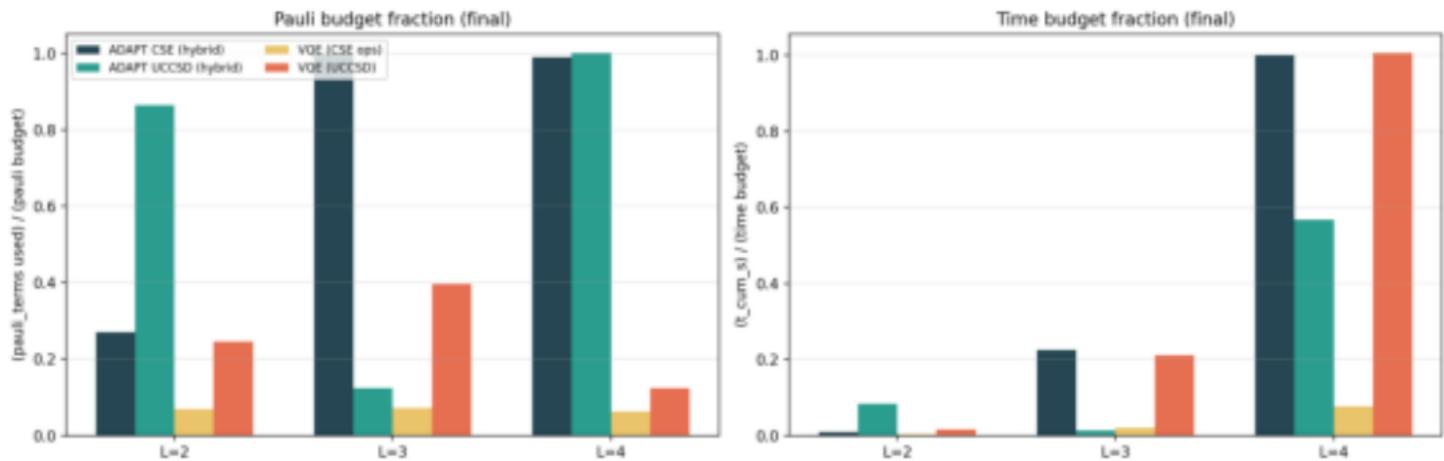


runs/compare\_vqe/delta\_e\_rel\_hist\_L6.png

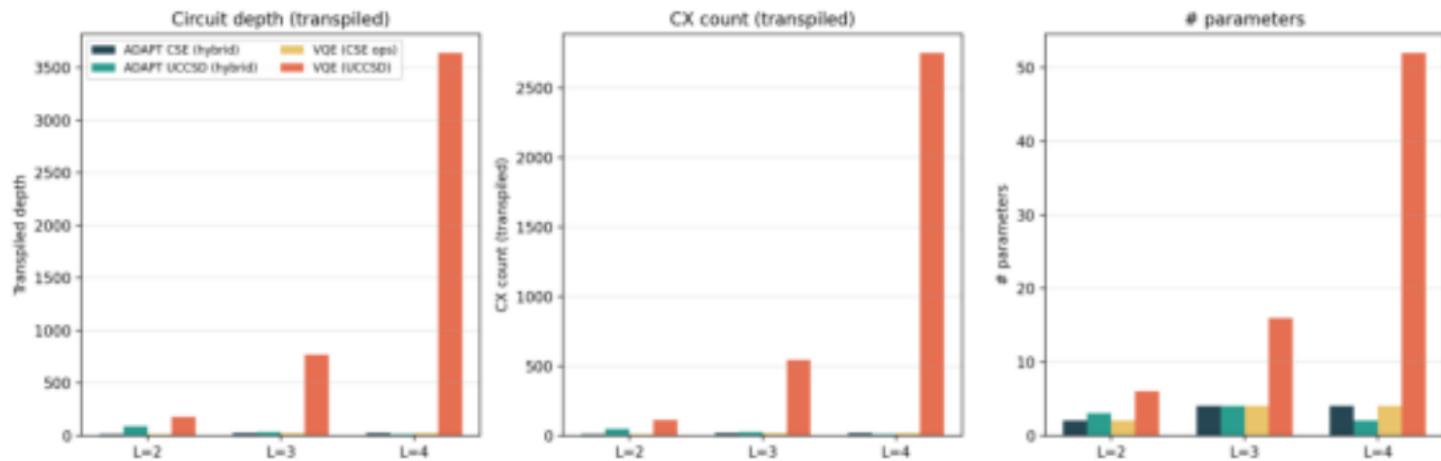
Relative error by ansatz type (L=6, n\_up=1, n\_down=1)



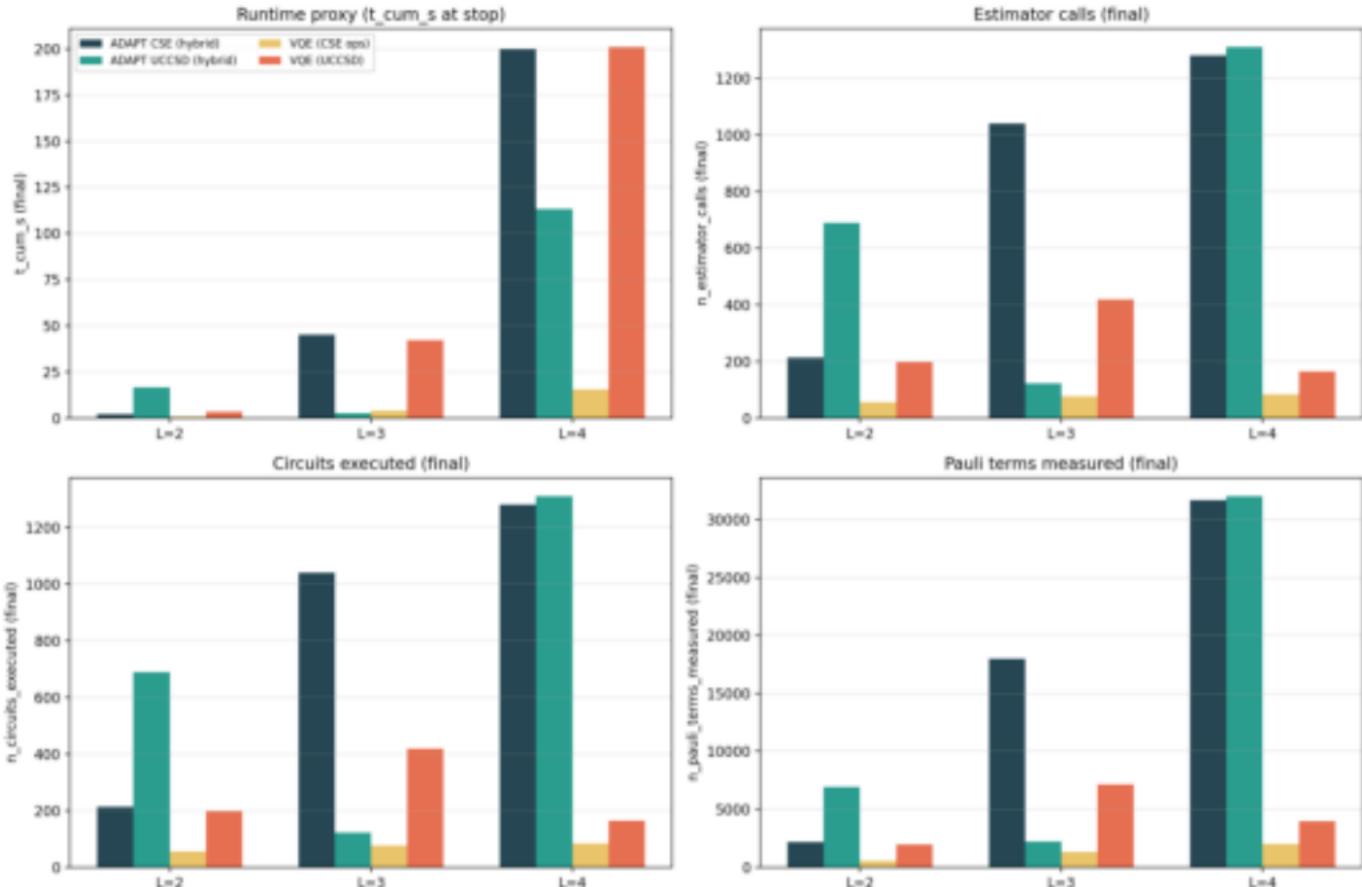
runs/compare\_vqe\_L2\_L3\_L4\_vqeparamsfix/bench\_budget\_fractions\_L2\_L3\_L4.png



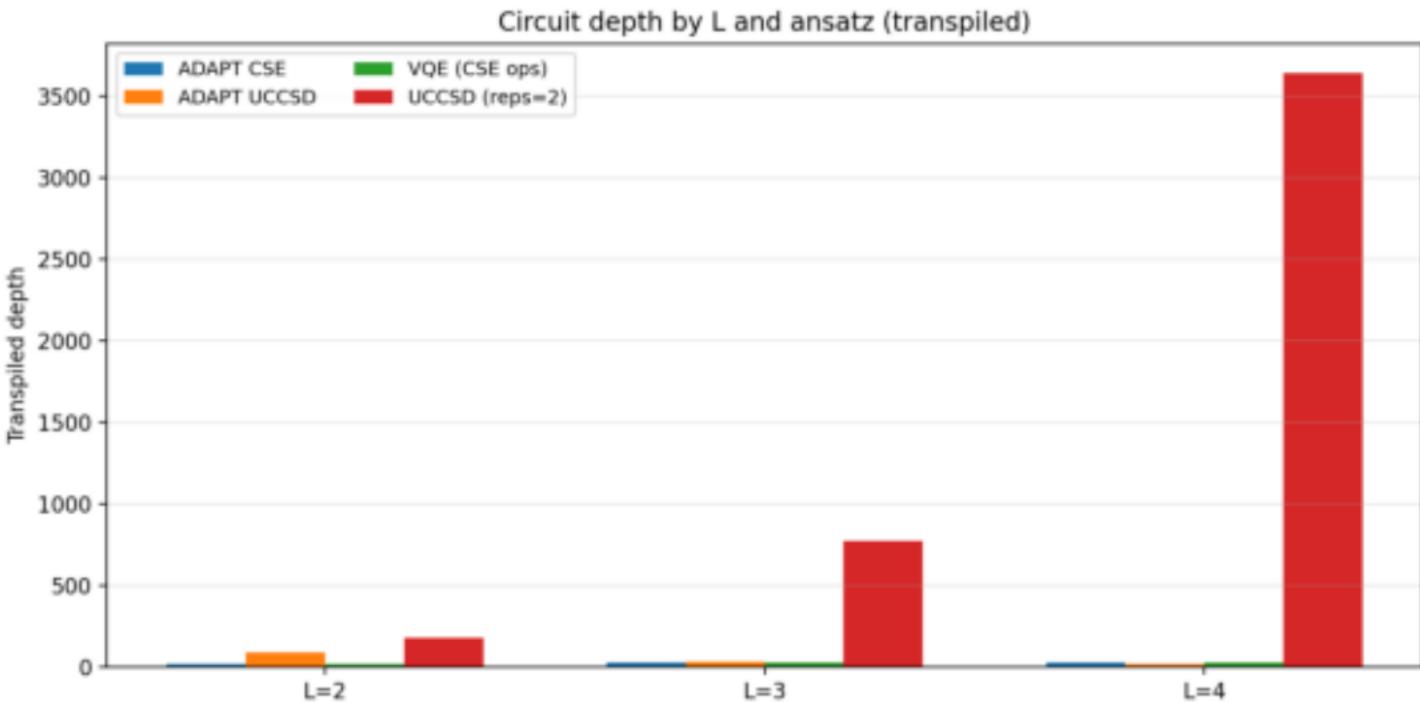
runs/compare\_vqe\_L2\_L3\_L4\_vqeparamsfix/bench\_circuit\_metrics\_L2\_L3\_L4.png



runs/compare\_vqe\_L2\_L3\_L4\_vqeparamsfix/bench\_cost\_metrics\_L2\_L3\_L4.png

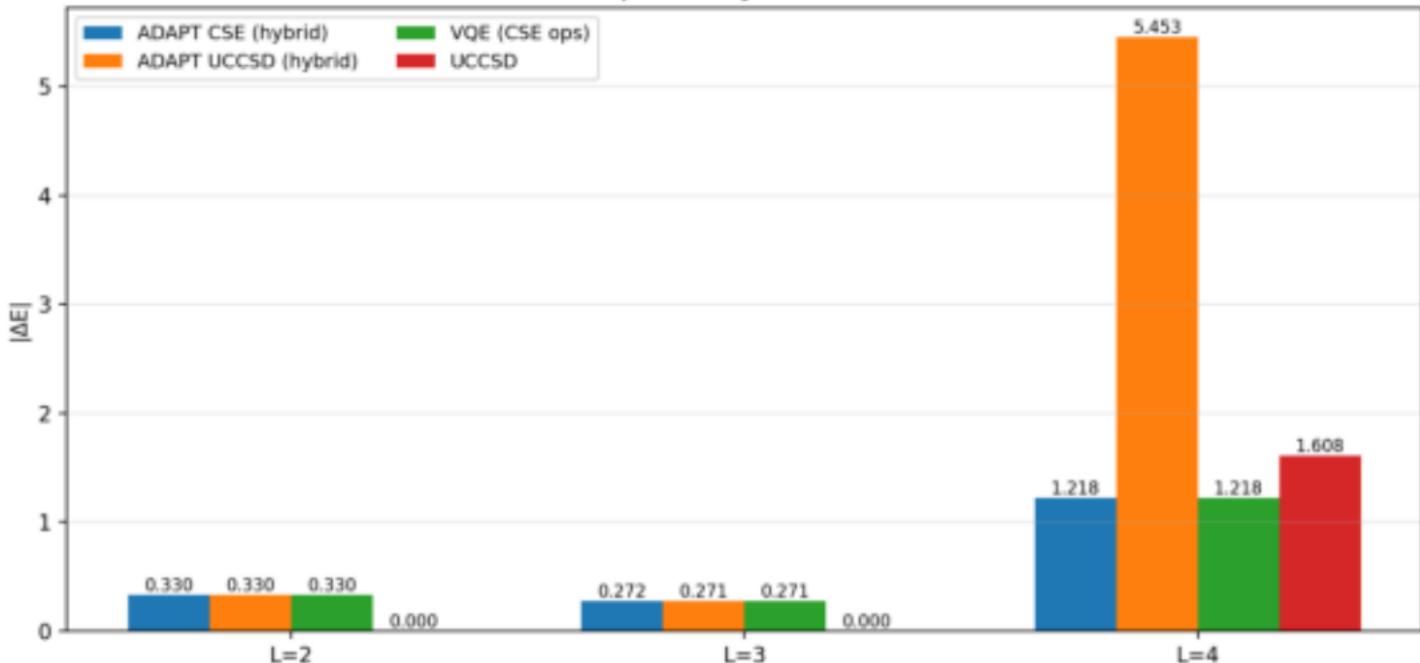


runs/compare\_vqe\_L2\_L3\_L4\_vqeparamsfix/bench\_depth\_transpiled\_L2\_L3\_L4.png

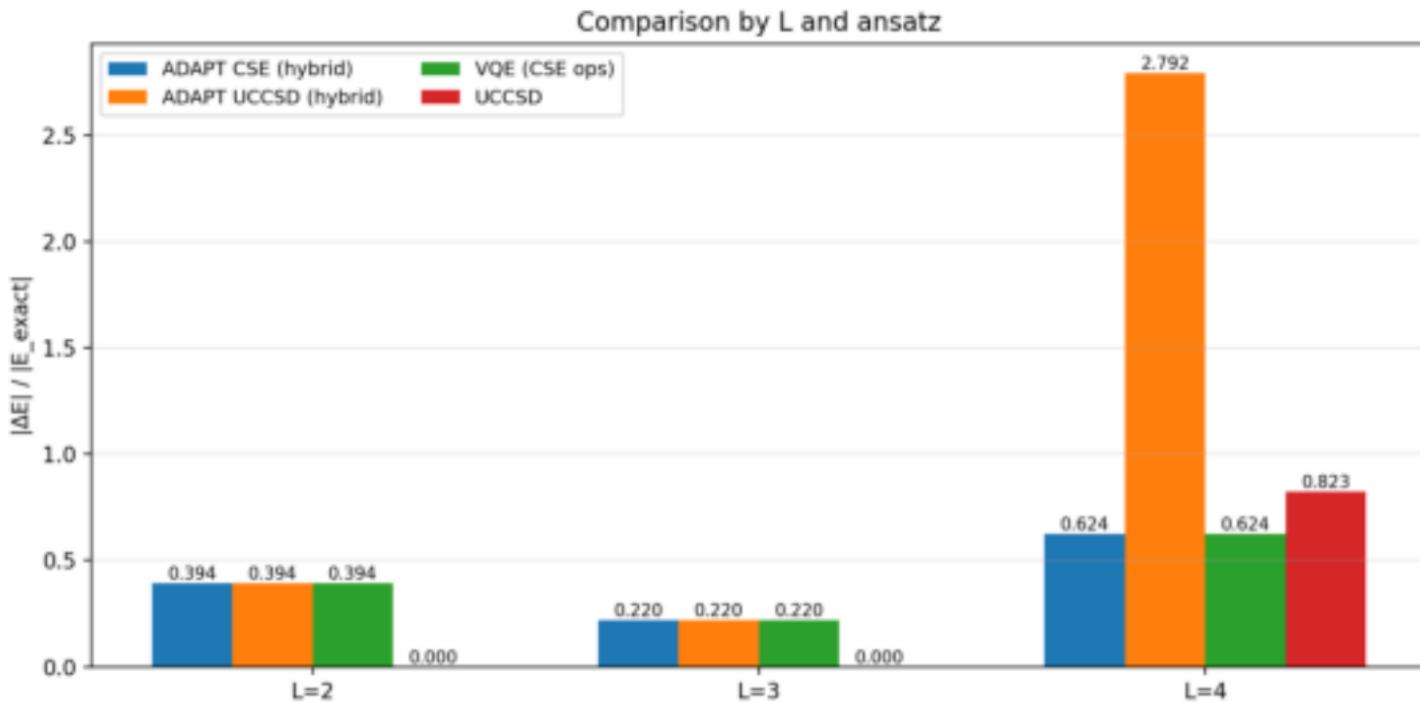


runs/compare\_vqe\_L2\_L3\_L4\_vqeparamsfix/compare\_bar\_abs\_L2\_L3\_L4.png

Comparison by L and ansatz

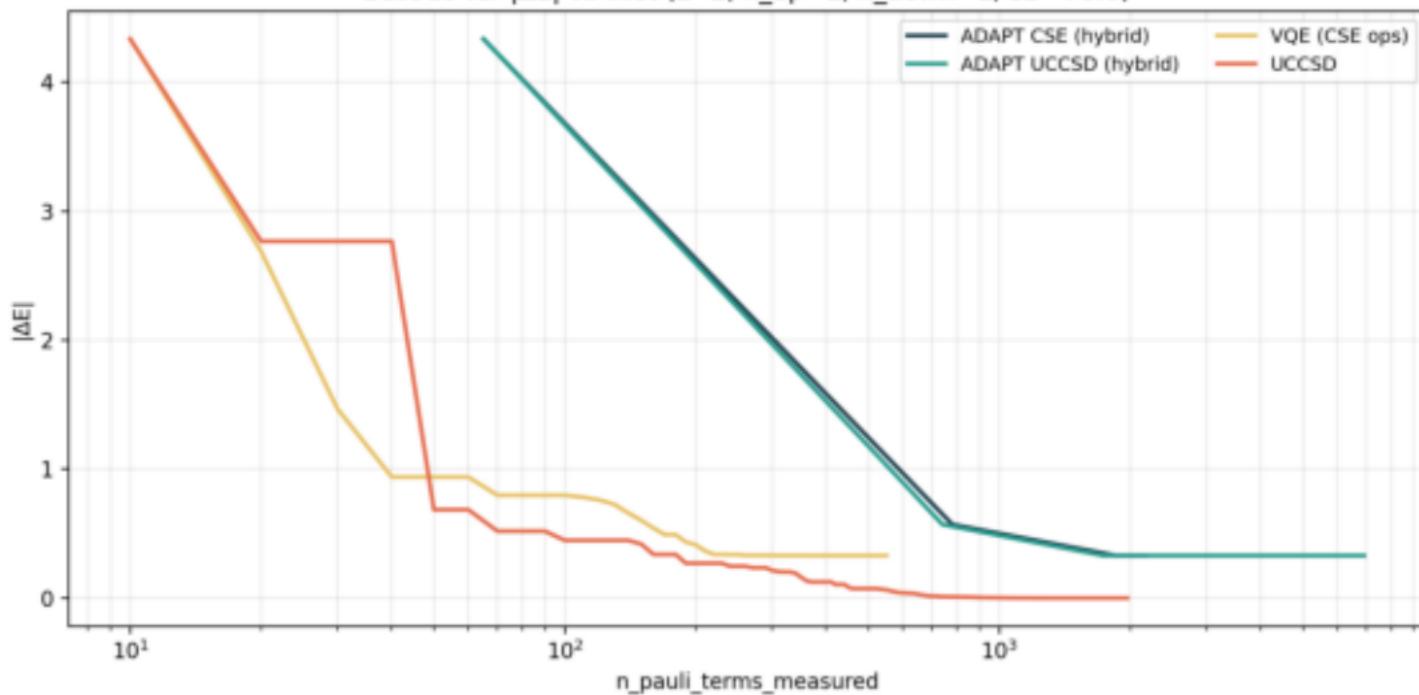


runs/compare\_vqe\_L2\_L3\_L4\_vqeparamsfix/compare\_bar\_rel\_L2\_L3\_L4.png



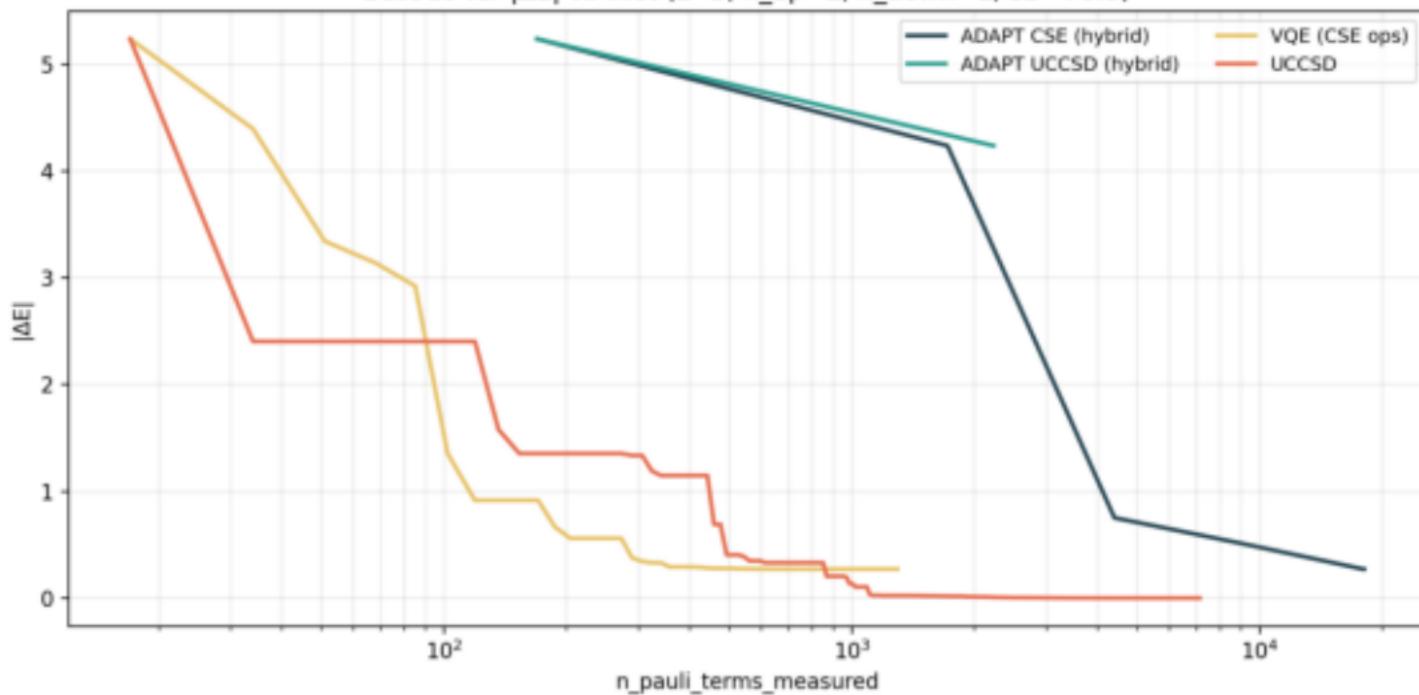
compare\_vqe\_L2\_L3\_L4\_vqeparamsfix/cost\_curve\_abs\_delta\_e\_vs\_n\_pauli\_terms\_measured\_L2\_Nup1\_Ndown

Best-so-far  $|\Delta E|$  vs cost ( $L=2$ ,  $n_{\text{up}}=1$ ,  $n_{\text{down}}=1$ ,  $Sz=+0.0$ )



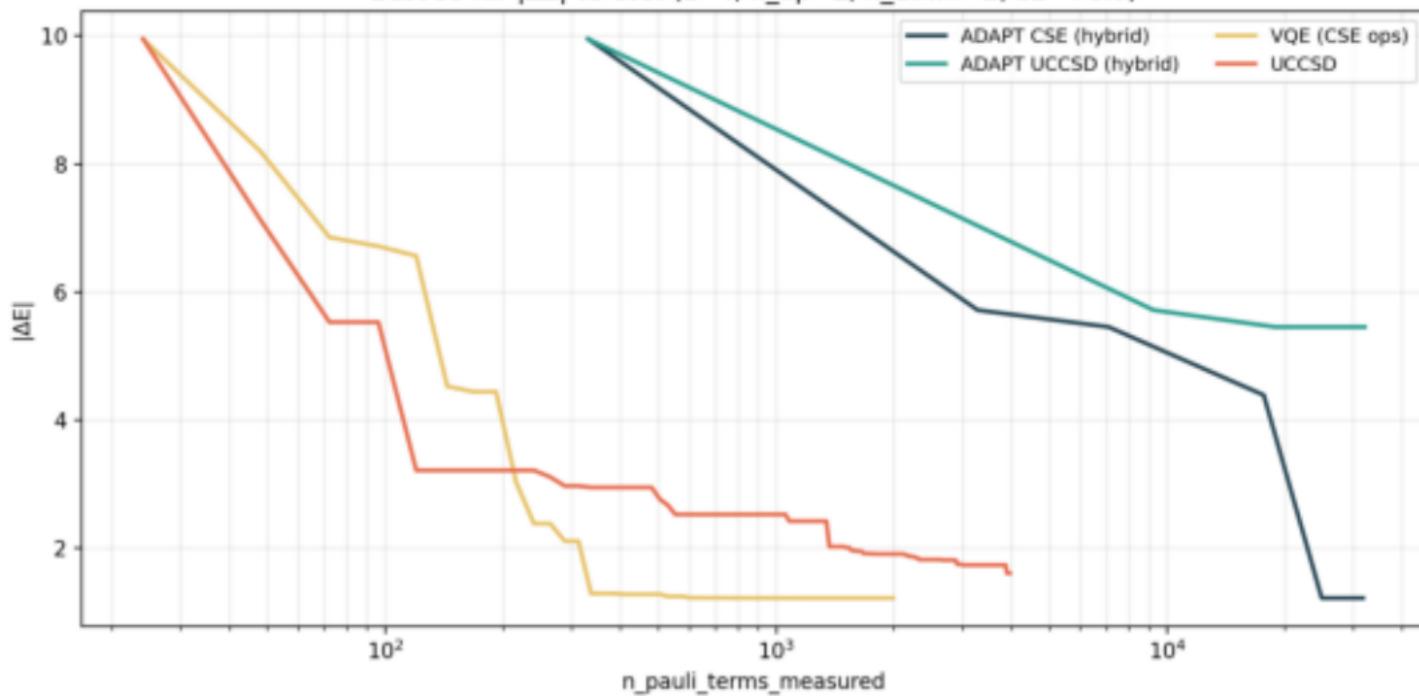
ompare\_vqe\_L2\_L3\_L4\_vqeparamsfix/cost\_curve\_abs\_delta\_e\_vs\_n\_pauli\_terms\_measured\_L3\_Nup2\_Ndown

Best-so-far  $|\Delta E|$  vs cost ( $L=3$ ,  $n_{\text{up}}=2$ ,  $n_{\text{down}}=1$ ,  $Sz=+0.5$ )



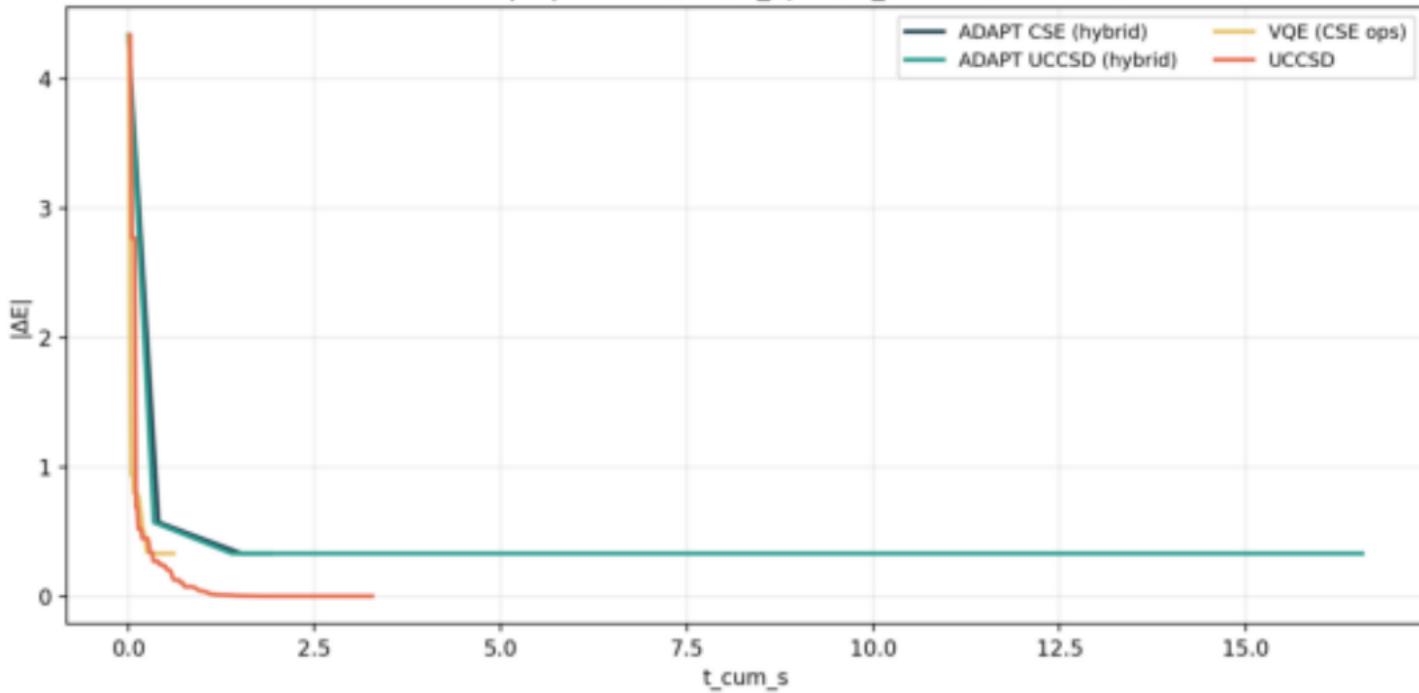
ompare\_vqe\_L2\_L3\_L4\_vqeparamsfix/cost\_curve\_abs\_delta\_e\_vs\_n\_pauli\_terms\_measured\_L4\_Nup2\_Ndown

Best-so-far  $|\Delta E|$  vs cost ( $L=4$ ,  $n_{\text{up}}=2$ ,  $n_{\text{down}}=2$ ,  $Sz=+0.0$ )



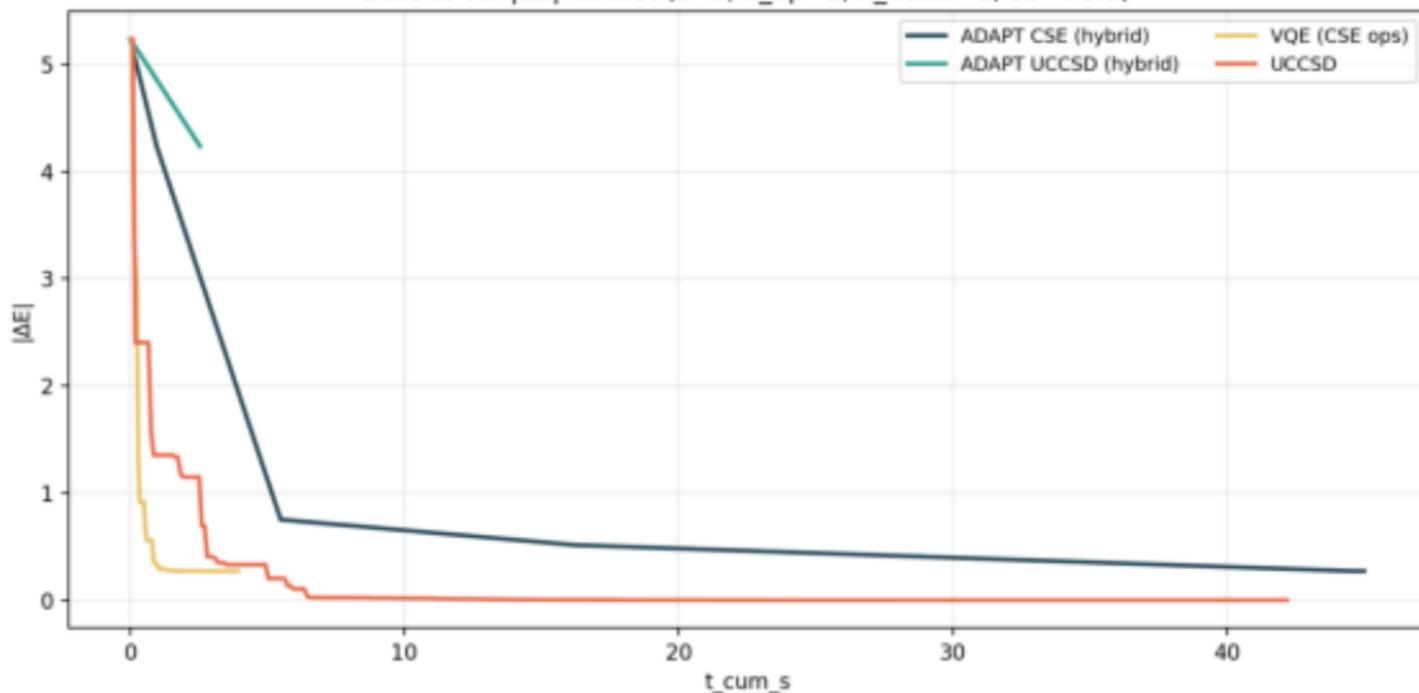
runs/compare\_vqe\_L2\_L3\_L4\_vqeparamsfix/cost\_curve\_abs\_delta\_e\_vs\_t\_cum\_s\_L2\_Nup1\_Ndown1.png

Best-so-far  $|\Delta E|$  vs cost ( $L=2$ ,  $n_{\text{up}}=1$ ,  $n_{\text{down}}=1$ ,  $Sz=+0.0$ )



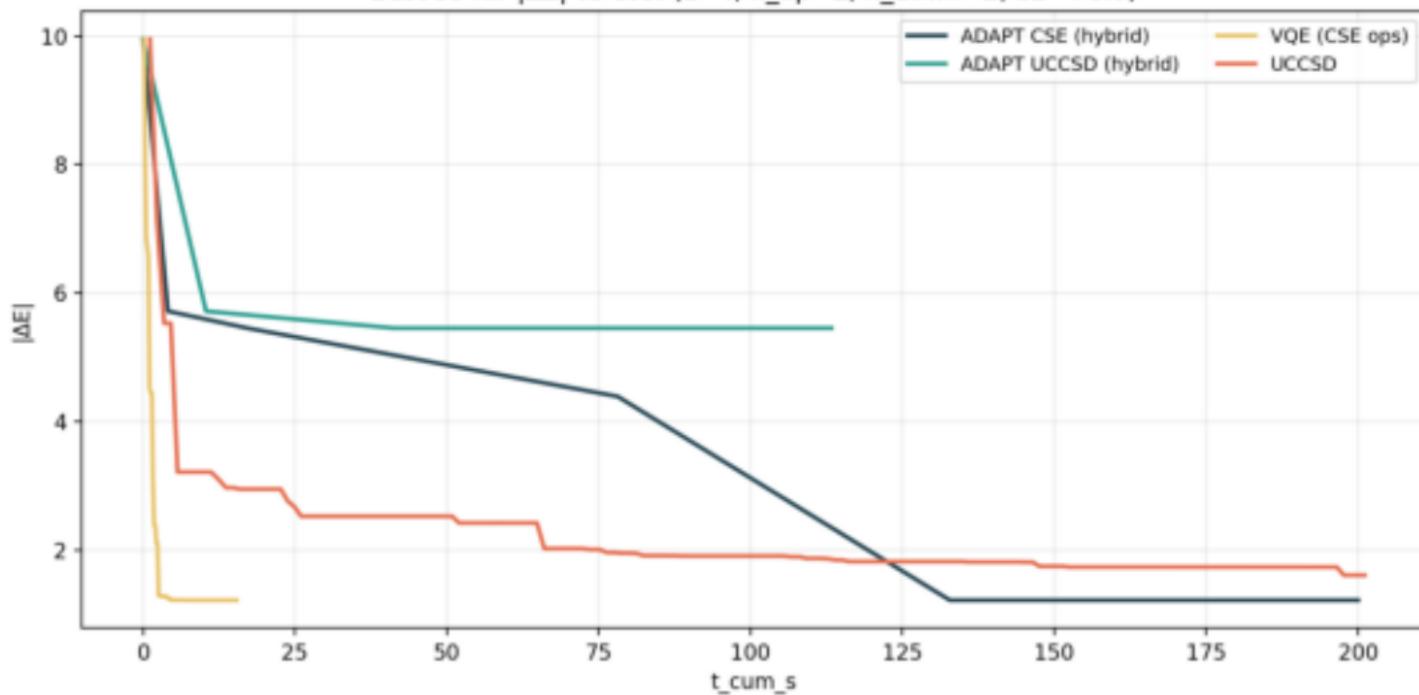
runs/compare\_vqe\_L2\_L3\_L4\_vqeparamsfix/cost\_curve\_abs\_delta\_e\_vs\_t\_cum\_s\_L3\_Nup2\_Ndown1.png

Best-so-far  $|\Delta E|$  vs cost ( $L=3$ ,  $n_{\text{up}}=2$ ,  $n_{\text{down}}=1$ ,  $Sz=+0.5$ )

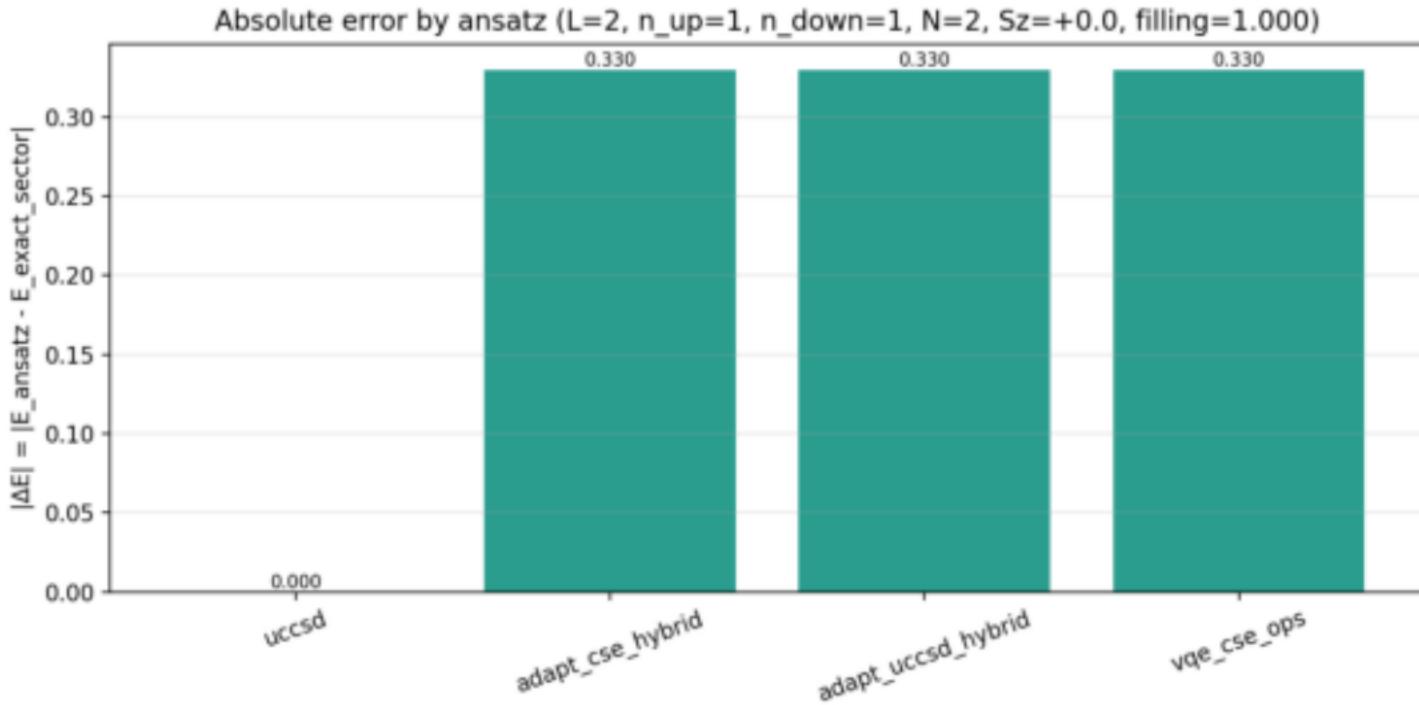


runs/compare\_vqe\_L2\_L3\_L4\_vqeparamsfix/cost\_curve\_abs\_delta\_e\_vs\_t\_cum\_s\_L4\_Nup2\_Ndown2.png

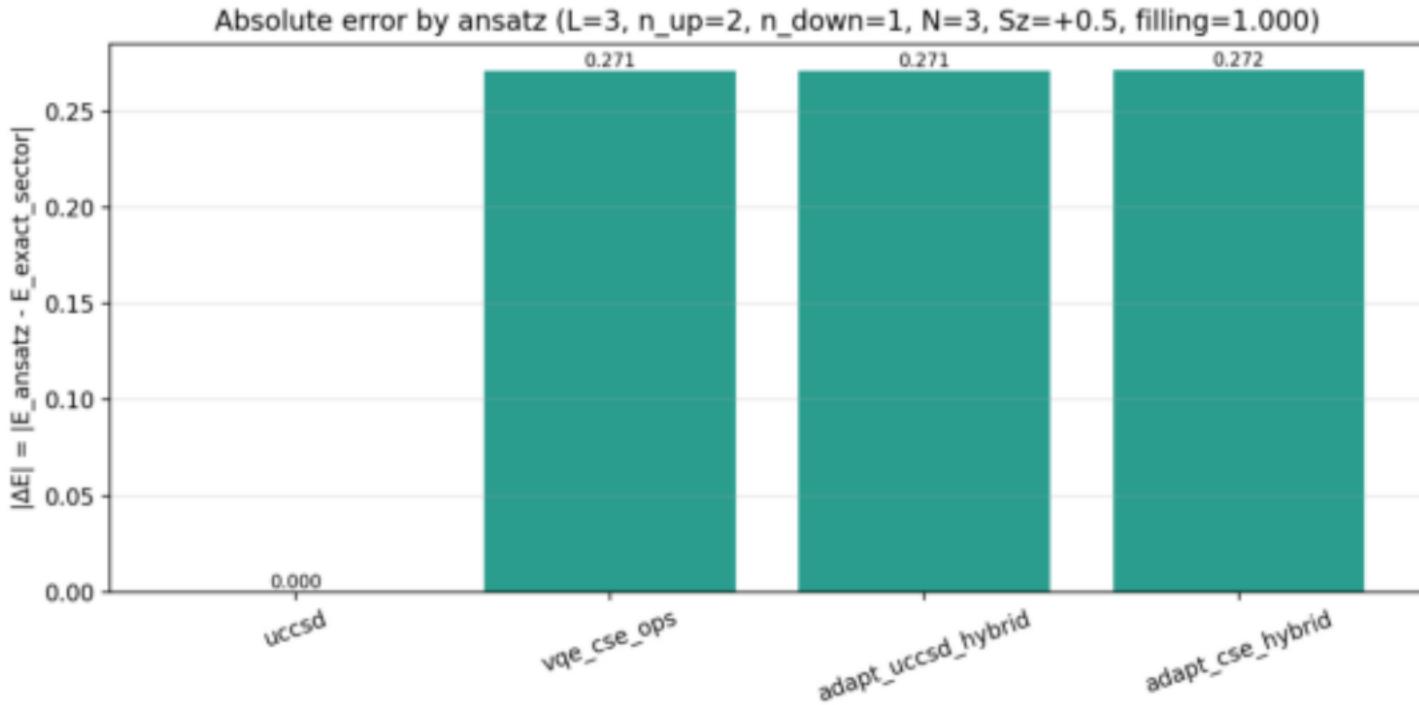
Best-so-far  $|\Delta E|$  vs cost ( $L=4$ ,  $n_{\text{up}}=2$ ,  $n_{\text{down}}=2$ ,  $Sz=+0.0$ )



runs/compare\_vqe\_L2\_L3\_L4\_vqeparamsfix/delta\_e\_abs\_hist\_L2\_Nup1\_Ndown1.png

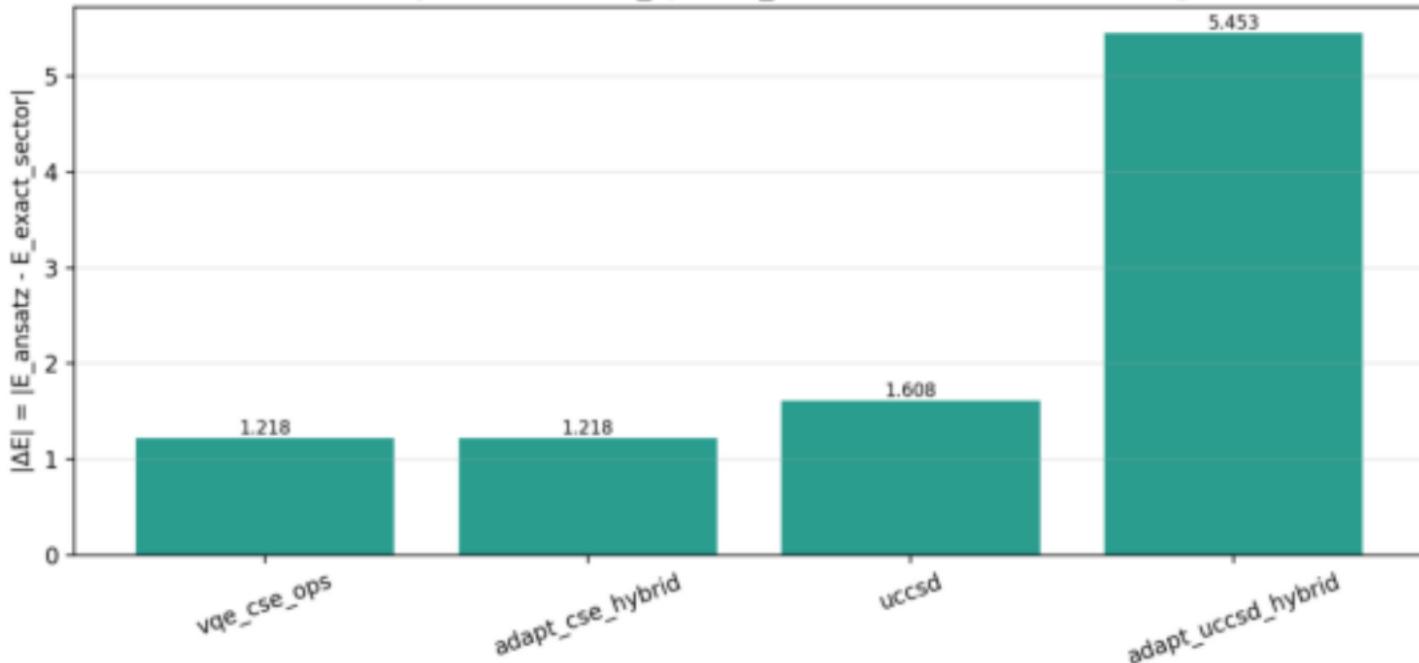


runs/compare\_vqe\_L2\_L3\_L4\_vqeparamsfix/delta\_e\_abs\_hist\_L3\_Nup2\_Ndown1.png

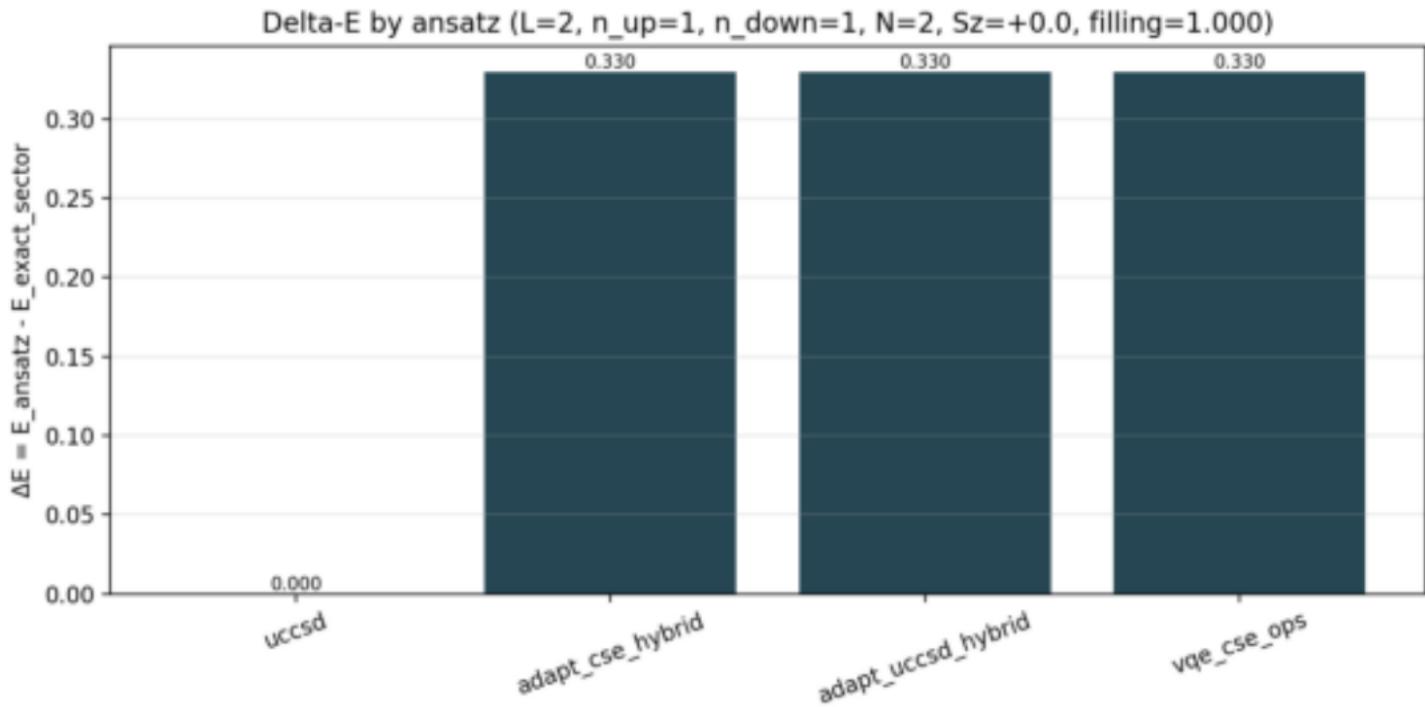


runs/compare\_vqe\_L2\_L3\_L4\_vqeparamsfix/delta\_e\_abs\_hist\_L4\_Nup2\_Ndown2.png

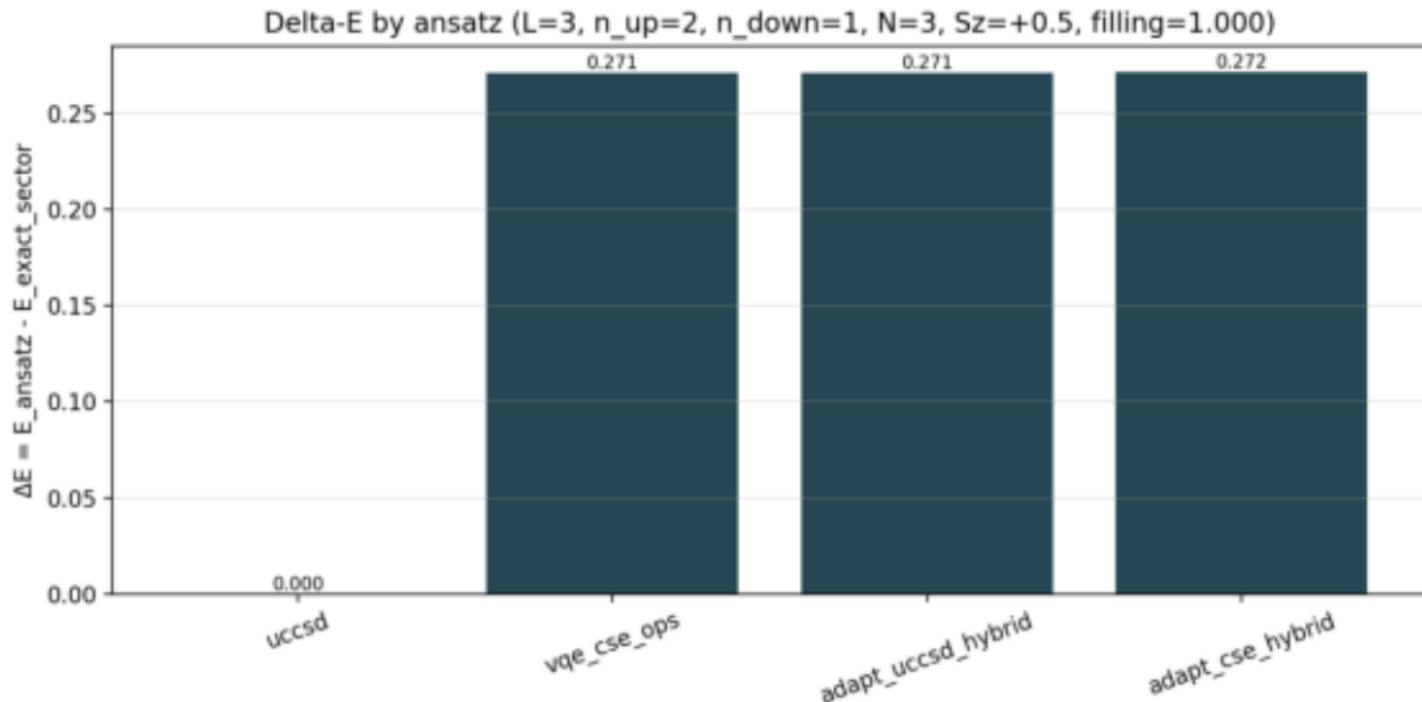
Absolute error by ansatz (L=4, n\_up=2, n\_down=2, N=4, Sz=+0.0, filling=1.000)



runs/compare\_vqe\_L2\_L3\_L4\_vqeparamsfix/delta\_e\_hist\_L2\_Nup1\_Ndown1.png

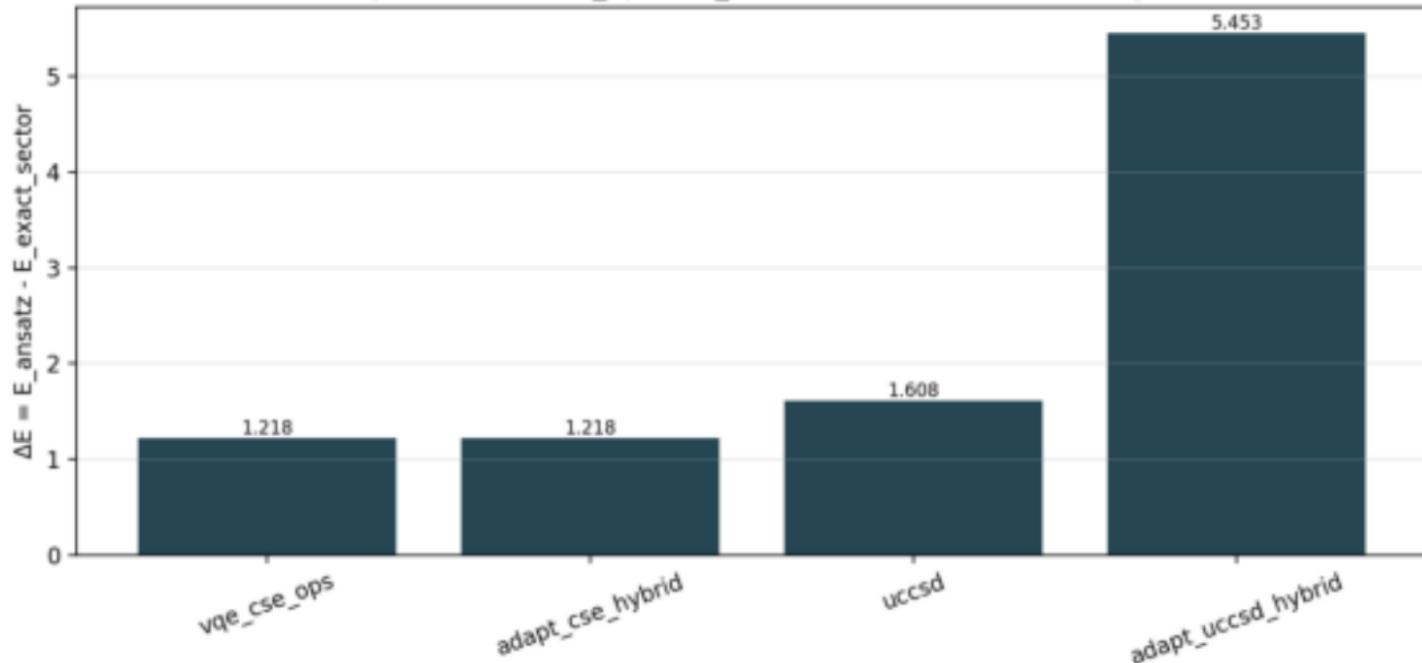


runs/compare\_vqe\_L2\_L3\_L4\_vqeparamsfix/delta\_e\_hist\_L3\_Nup2\_Ndown1.png

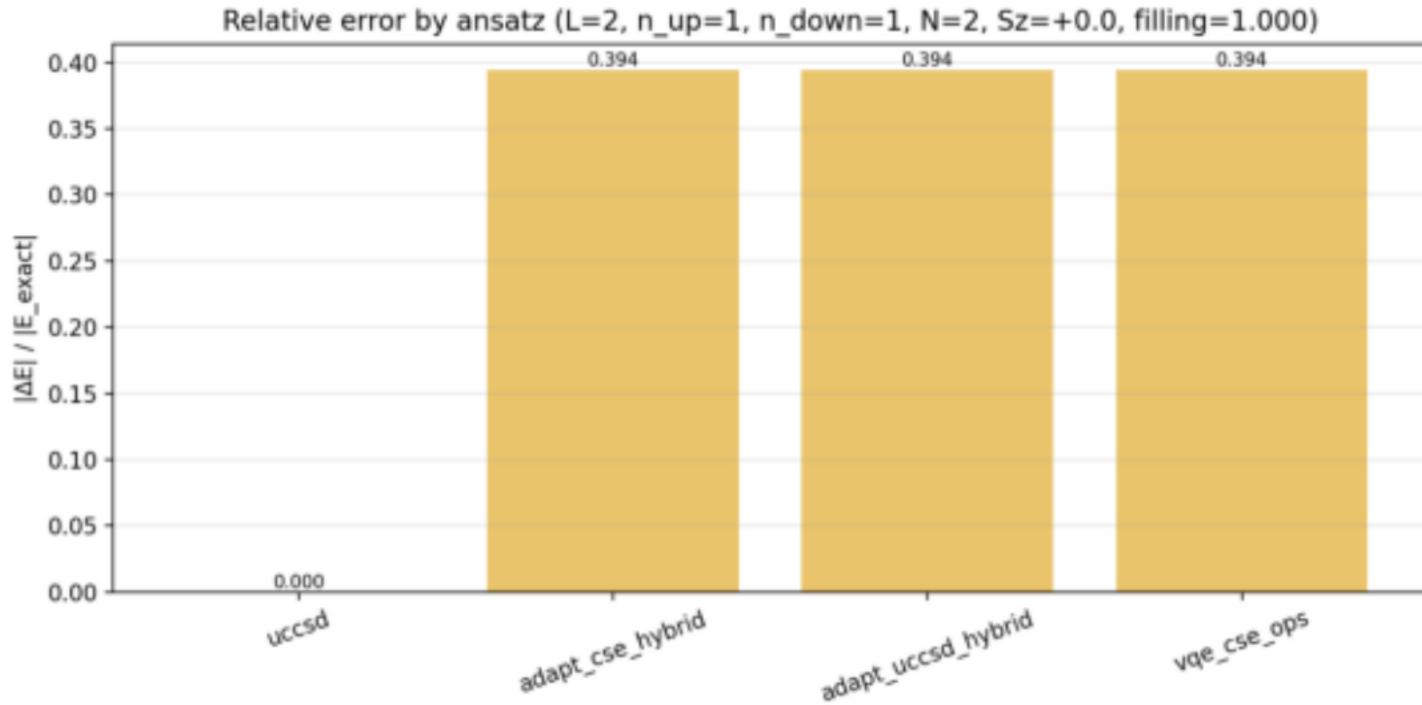


runs/compare\_vqe\_L2\_L3\_L4\_vqeparamsfix/delta\_e\_hist\_L4\_Nup2\_Ndown2.png

Delta-E by ansatz (L=4, n\_up=2, n\_down=2, N=4, Sz=+0.0, filling=1.000)

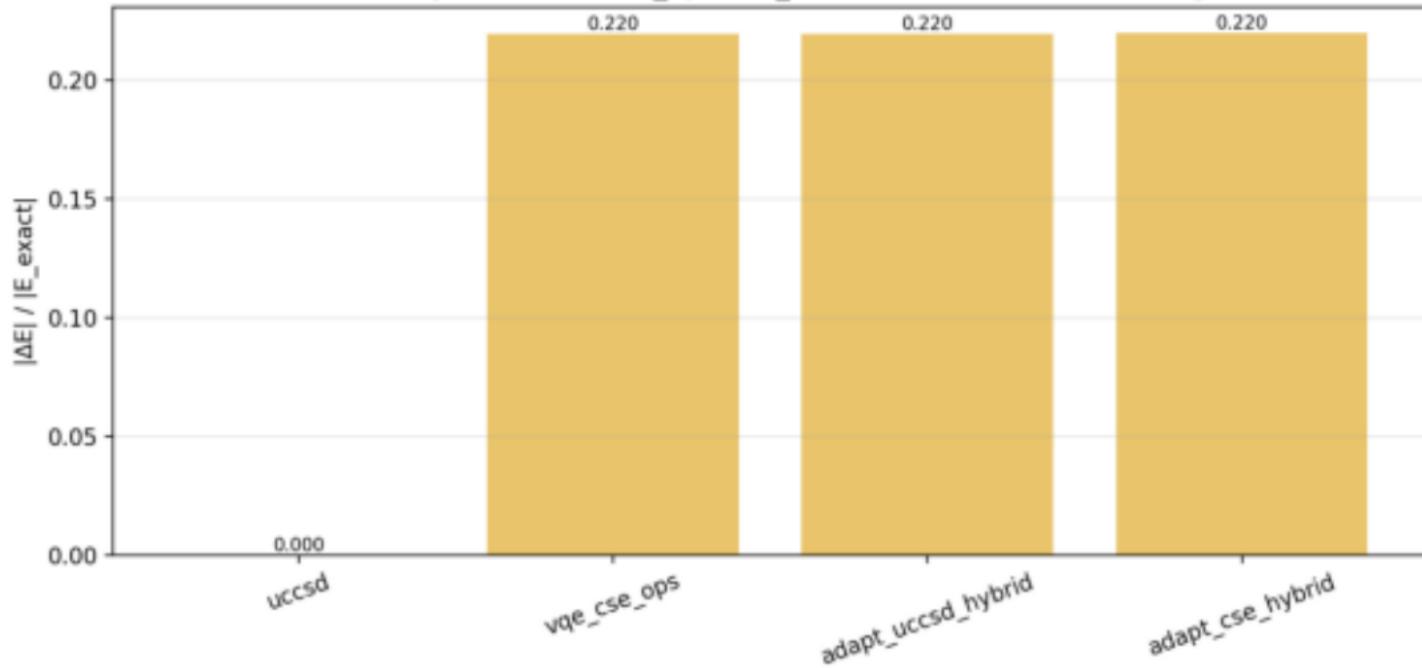


runs/compare\_vqe\_L2\_L3\_L4\_vqeparamsfix/delta\_e\_rel\_hist\_L2\_Nup1\_Ndown1.png



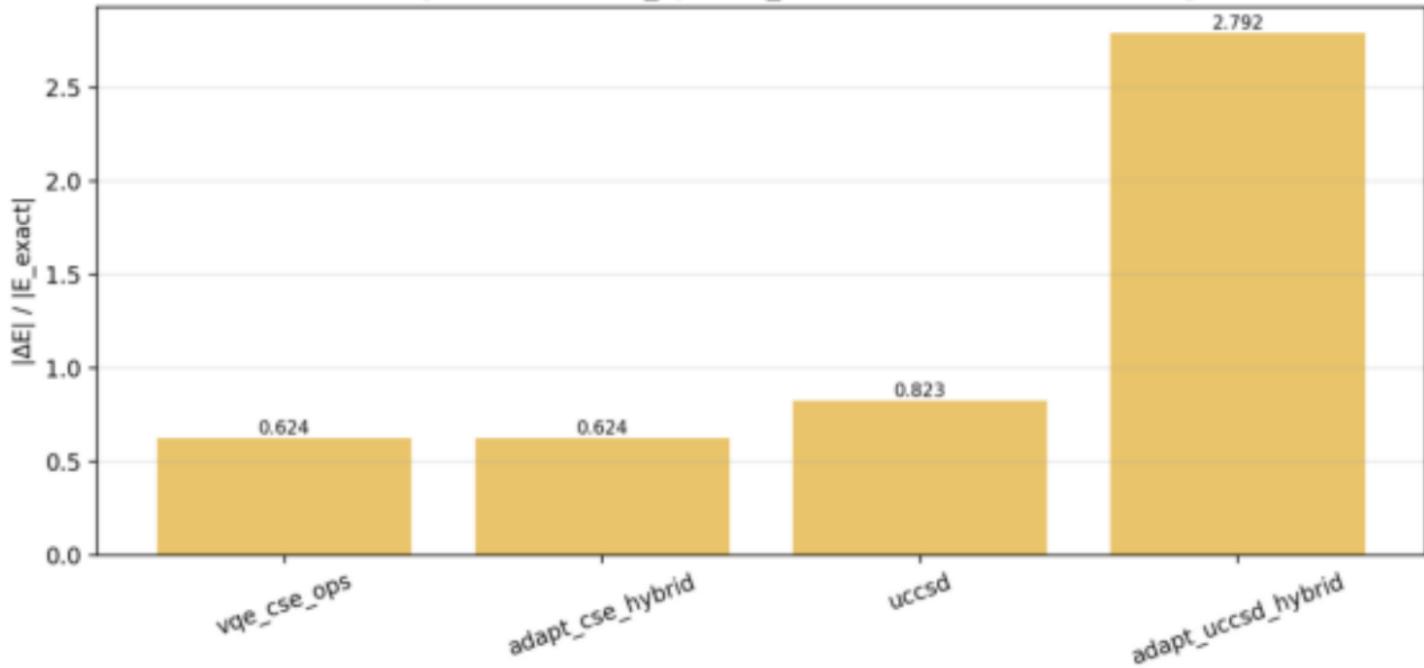
runs/compare\_vqe\_L2\_L3\_L4\_vqeparamsfix/delta\_e\_rel\_hist\_L3\_Nup2\_Ndown1.png

Relative error by ansatz (L=3, n\_up=2, n\_down=1, N=3, Sz=+0.5, filling=1.000)



runs/compare\_vqe\_L2\_L3\_L4\_vqeparamsfix/delta\_e\_rel\_hist\_L4\_Nup2\_Ndown2.png

Relative error by ansatz (L=4, n\_up=2, n\_down=2, N=4, Sz=+0.0, filling=1.000)



runs/quicktest\_L2\_Nup1\_Ndown1/adapt3d.png

