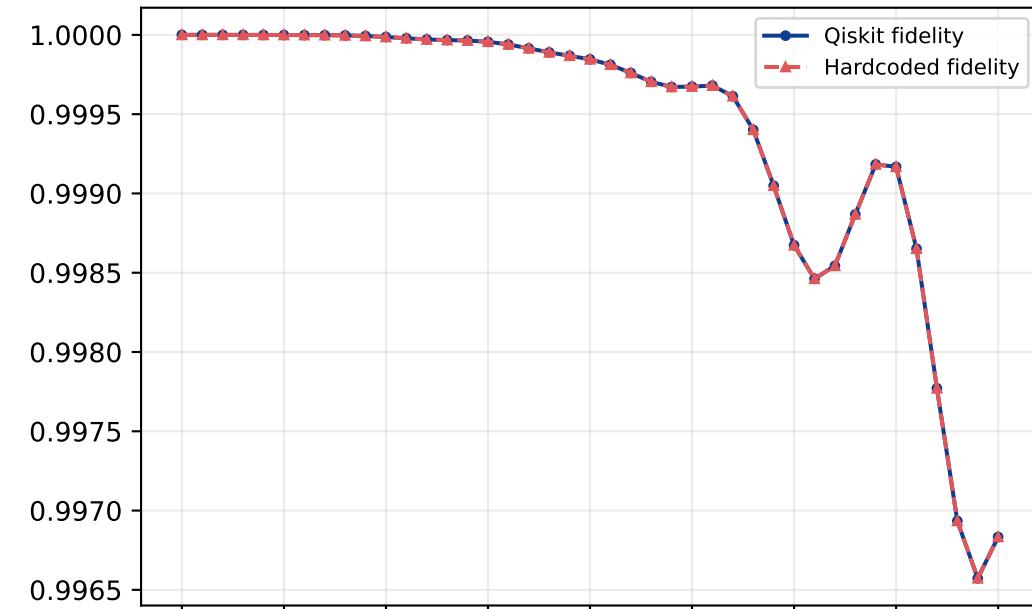
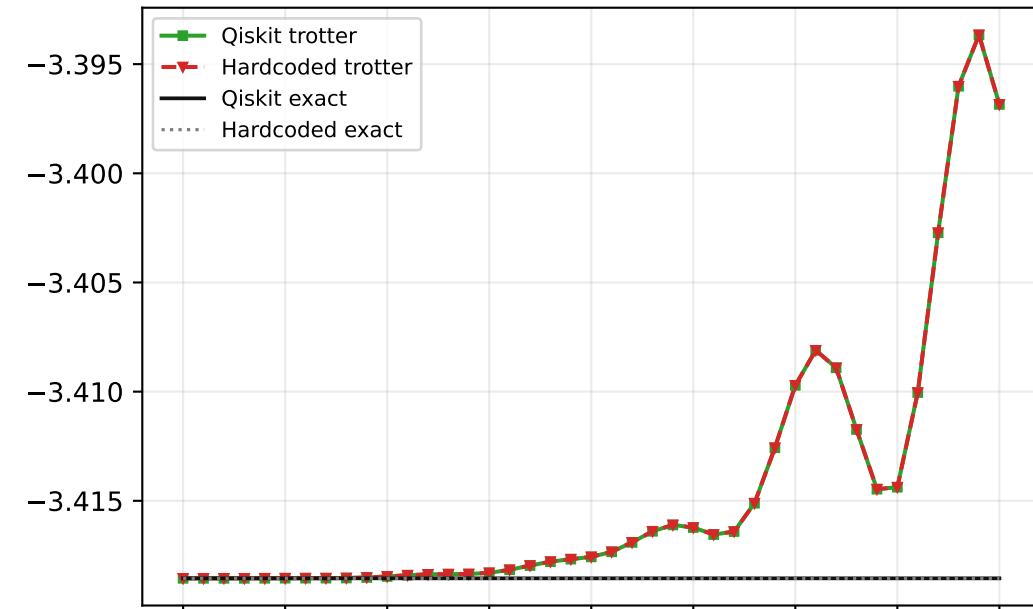


# Pipeline Comparison L=4: Hardcoded vs Qiskit

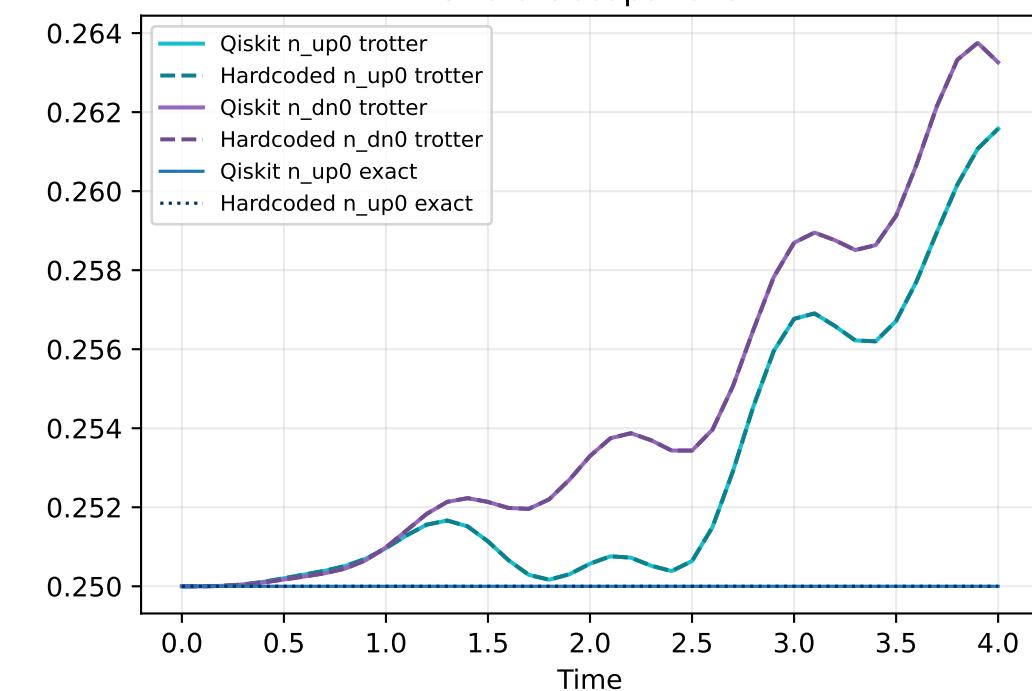
Fidelity



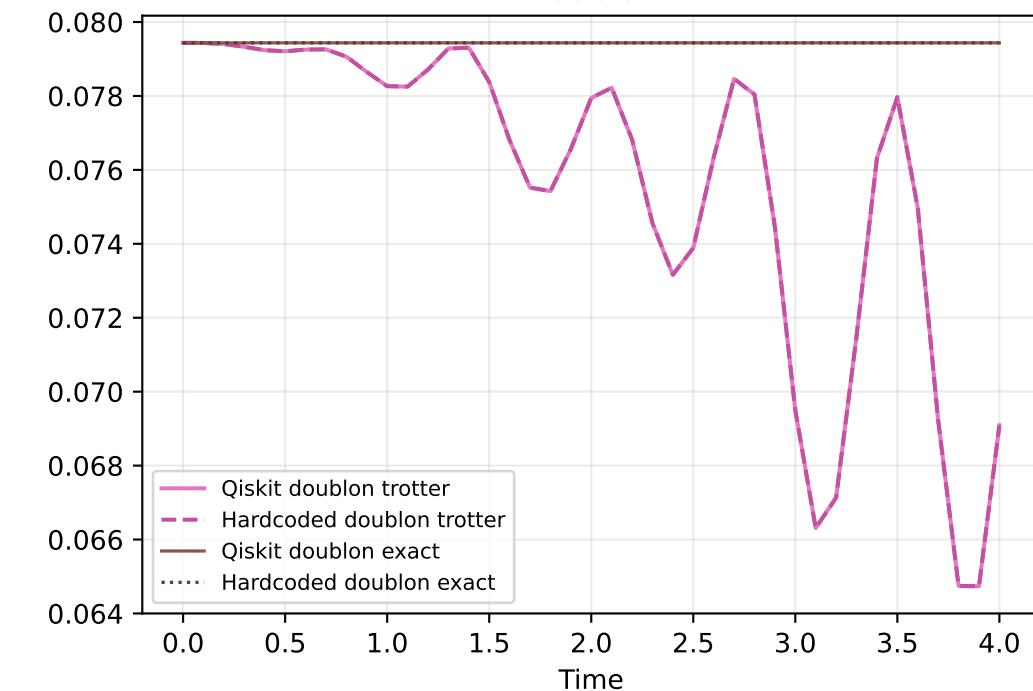
Energy



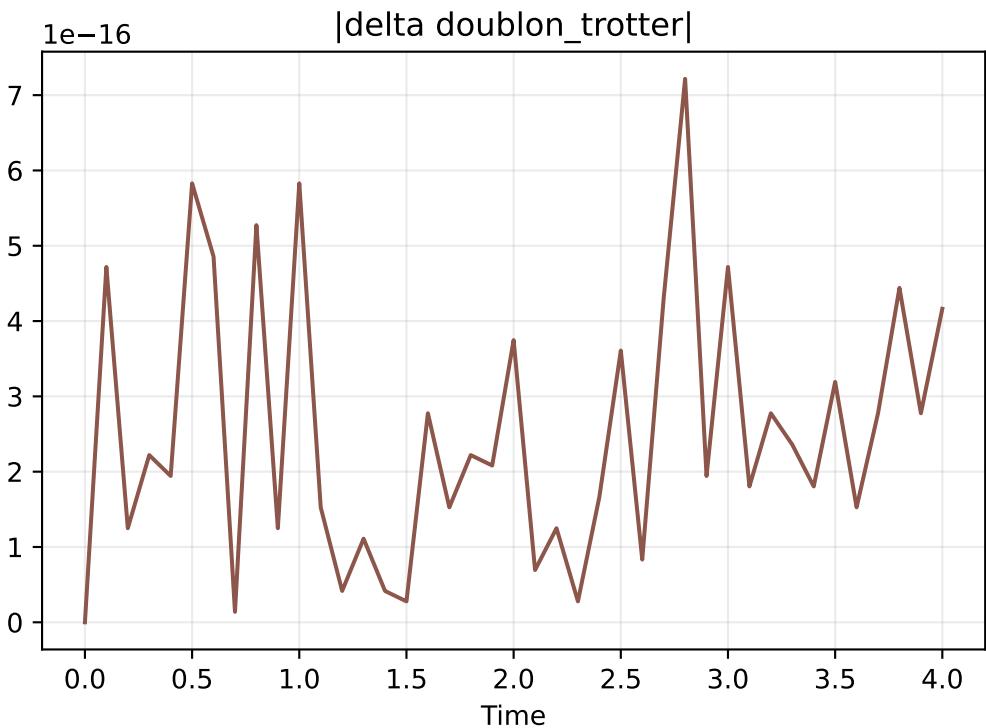
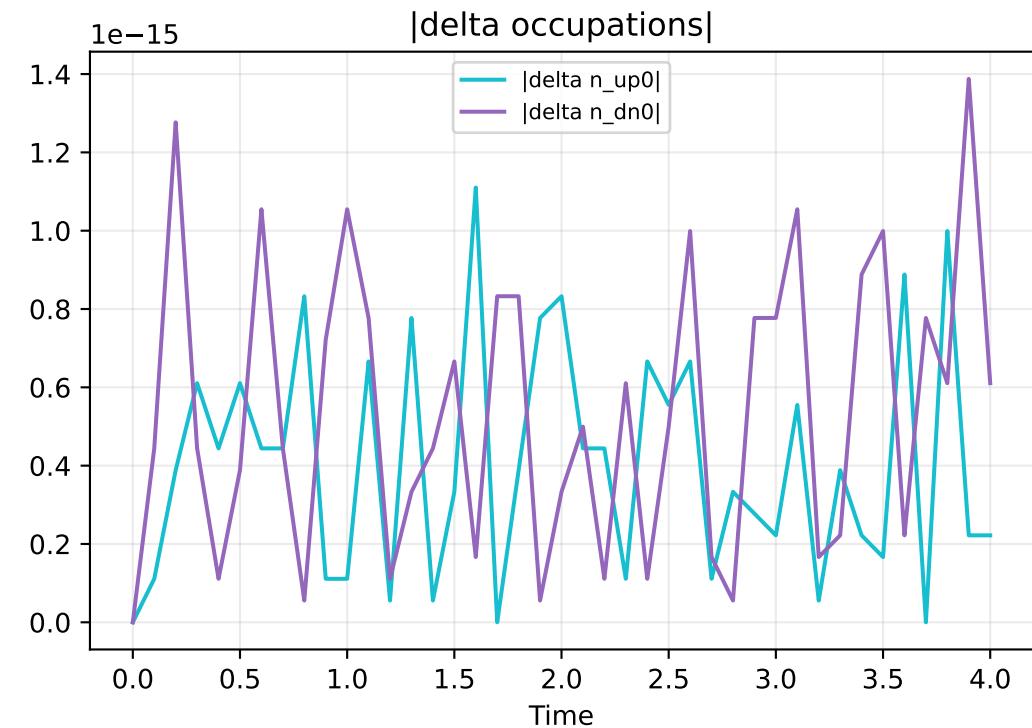
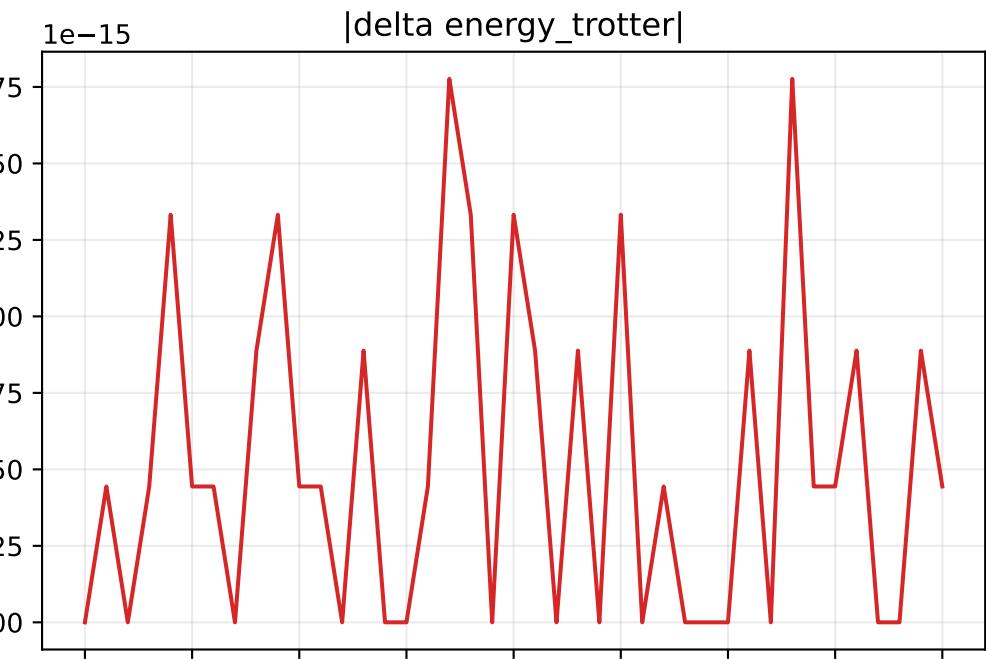
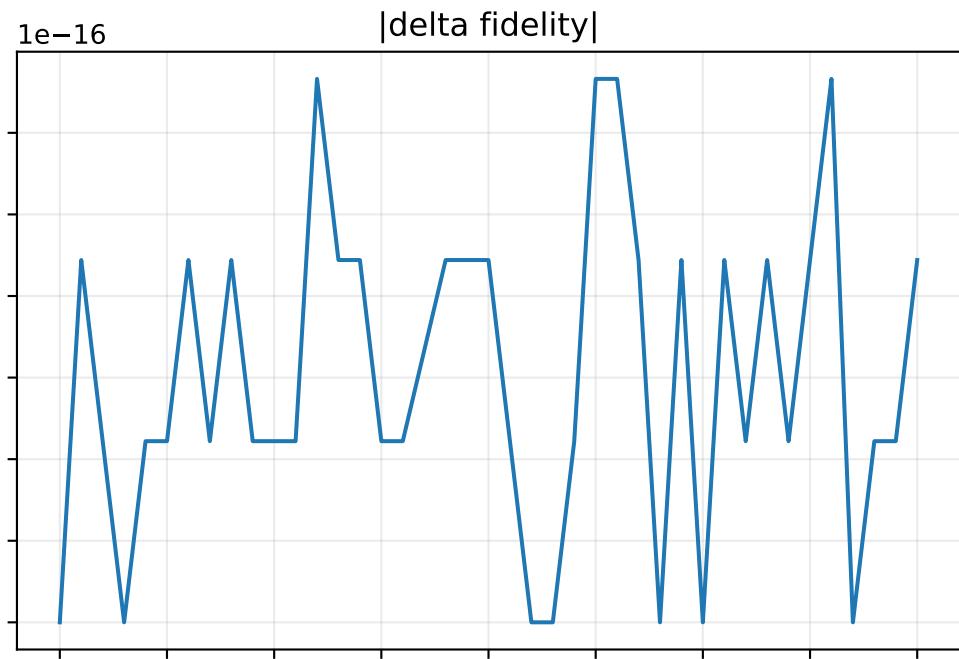
Site-0 Occupations



Doublon



# Delta Diagnostics L=4



```
L=4 metrics summary
```

```
ground_state_energy_abs_delta = 0.0
fidelity max/mean/final = 6.661338147750939e-16 / 3.059882970308358e-16 / 4.440892098500626e-16
energy_trotter max/mean/final = 1.7763568394002505e-15 / 5.199093188488538e-16 / 4.440892098500626e-16
n_up_site0_trotter max/mean/final = 1.1102230246251565e-15 / 4.0617915535066704e-16 / 2.220446049250313e-16
n_dn_site0_trotter max/mean/final = 1.3877787807814457e-15 / 5.388643460985516e-16 / 6.106226635438361e-16
doublon_trotter max/mean/final = 7.216449660063518e-16 / 2.5250804157633134e-16 / 4.163336342344337e-16

checks = {'ground_state_energy_abs_delta': True, 'fidelity_max_abs_delta': True, 'energy_trotter_max_abs_delta': True, 'n_up_s
PASS = True
```