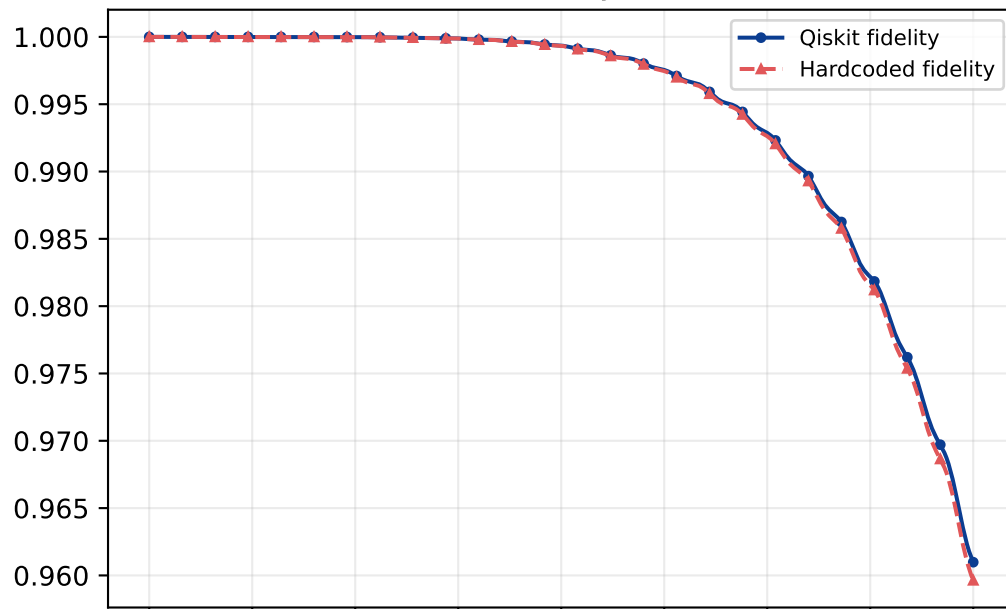
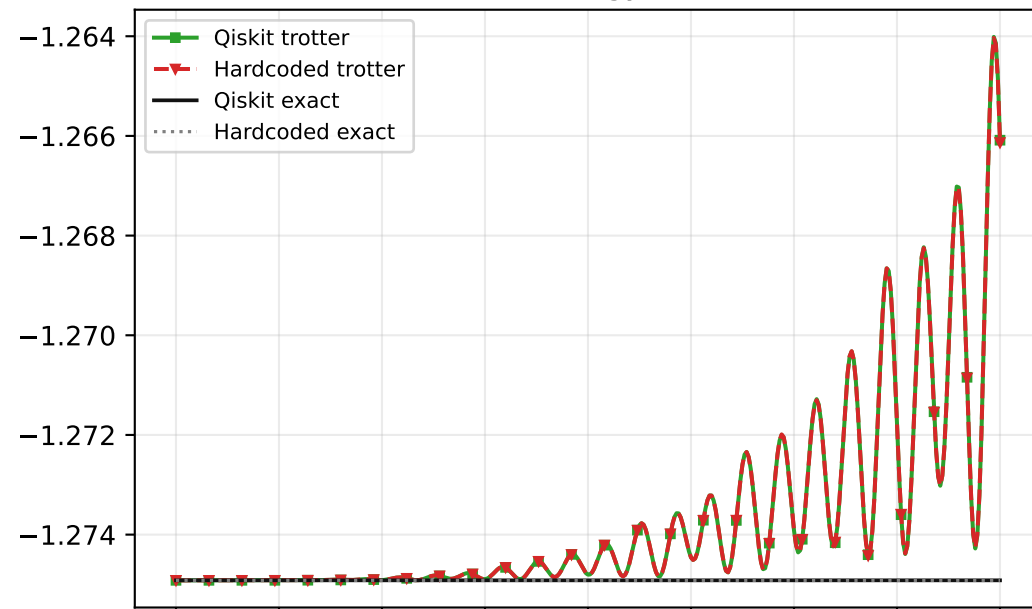


Pipeline Comparison L=3: Hardcoded vs Qiskit

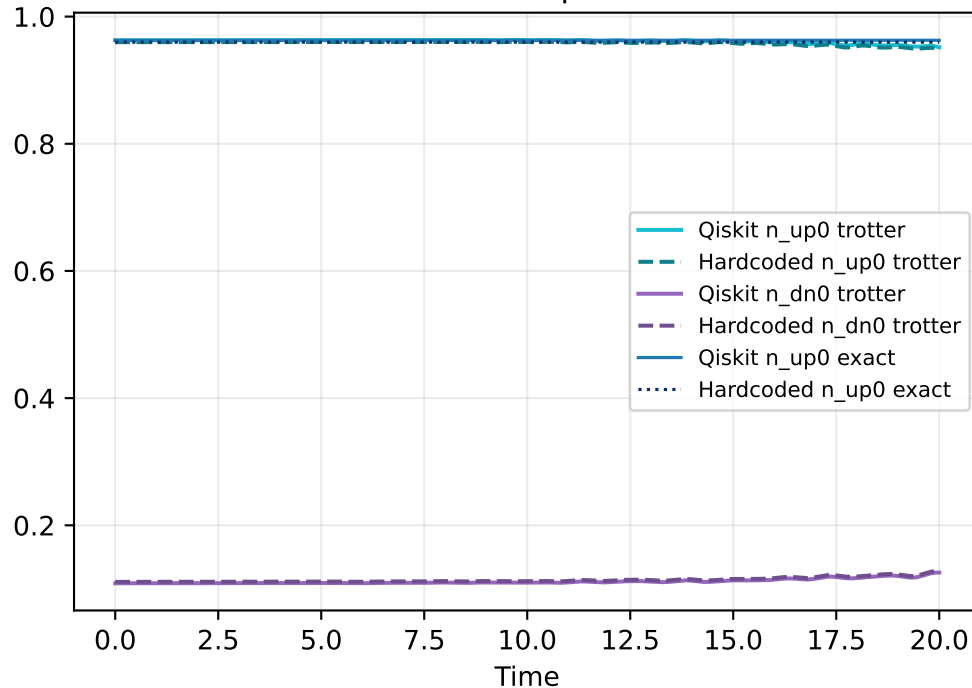
Fidelity



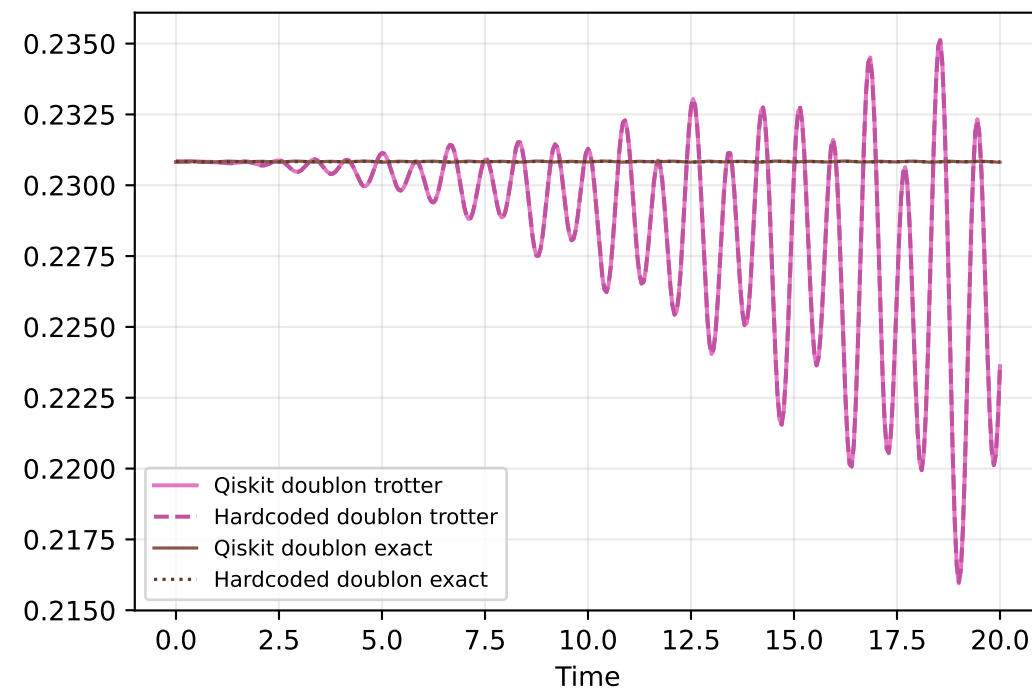
Energy



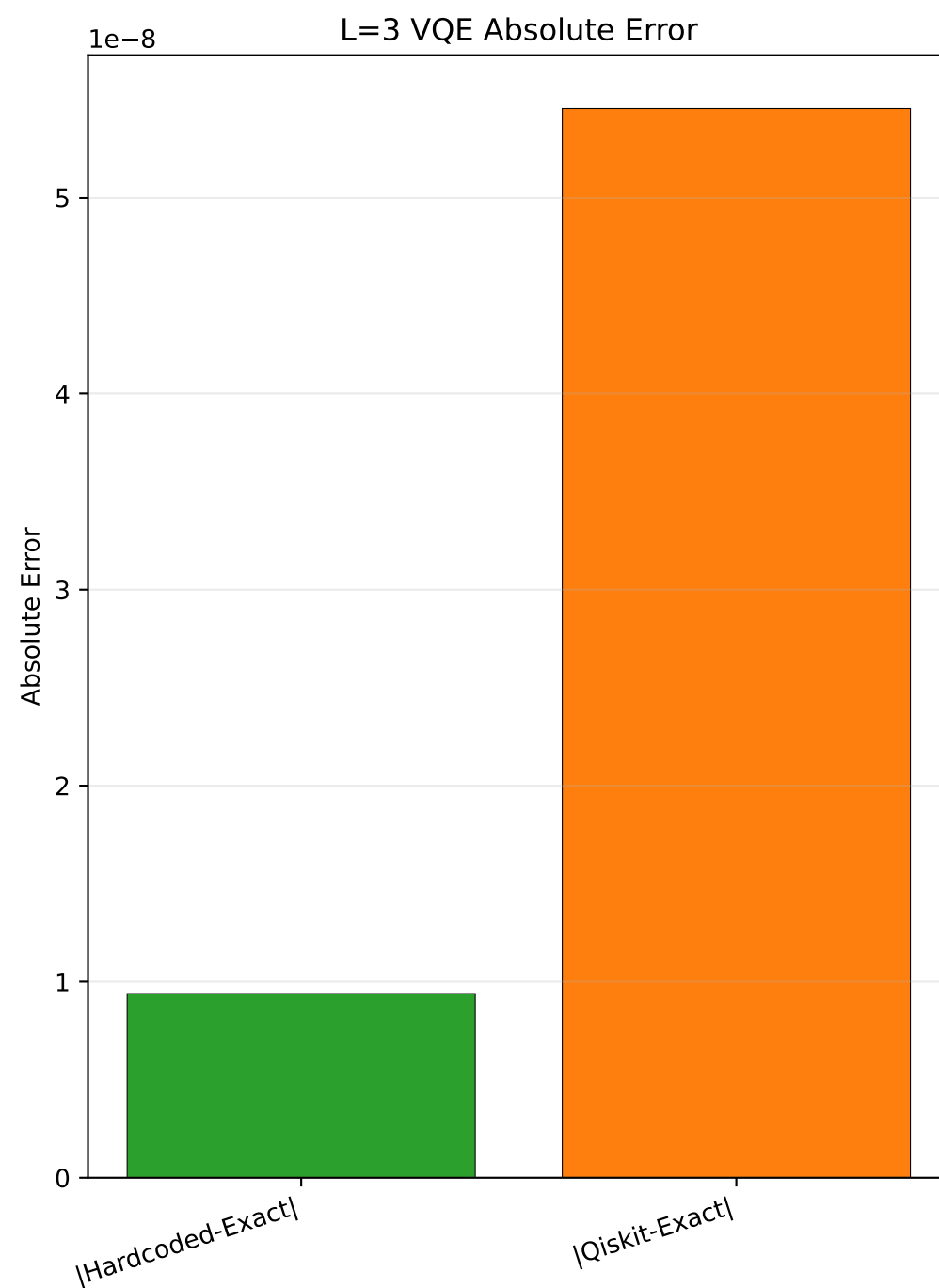
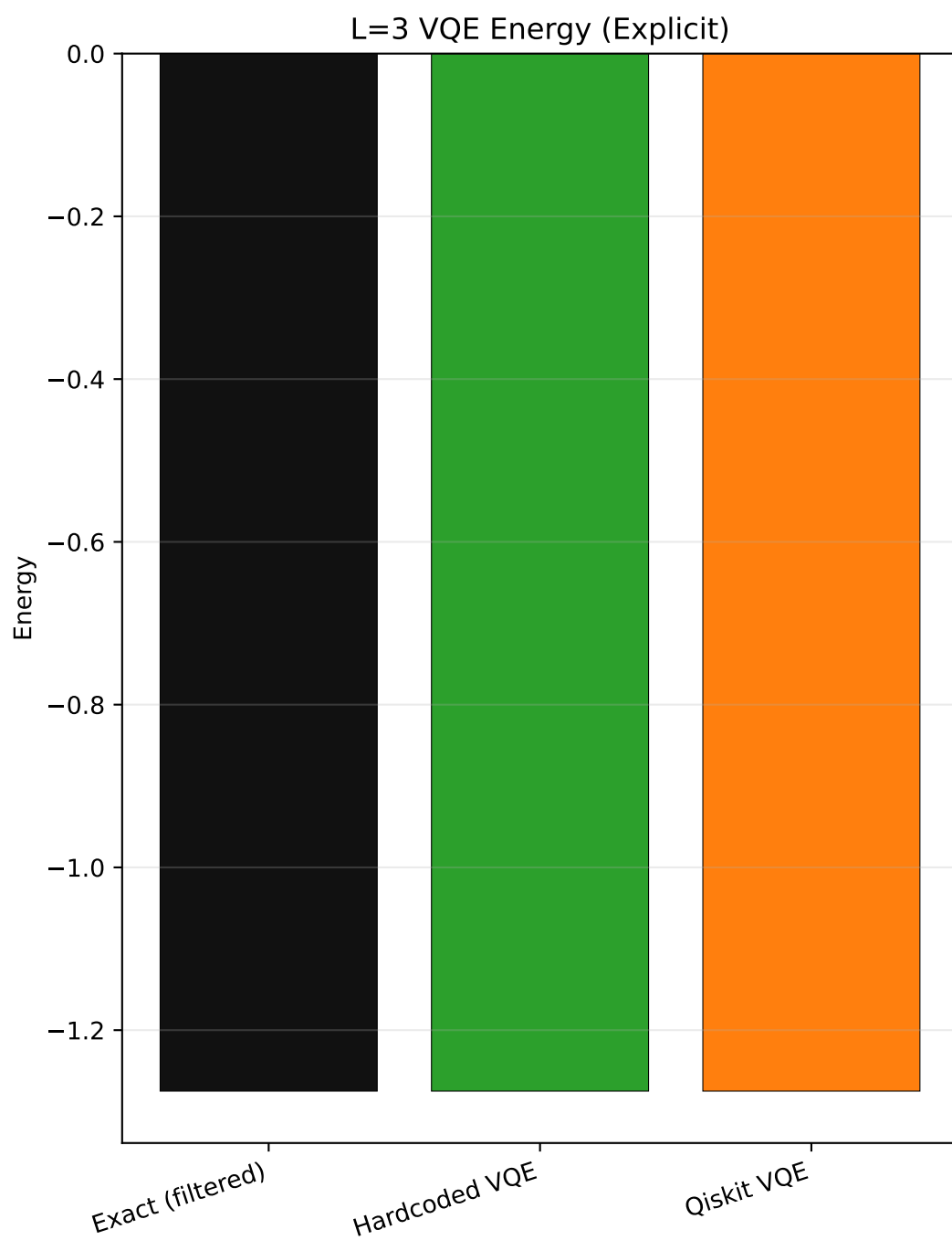
Site-0 Occupations



Doublon

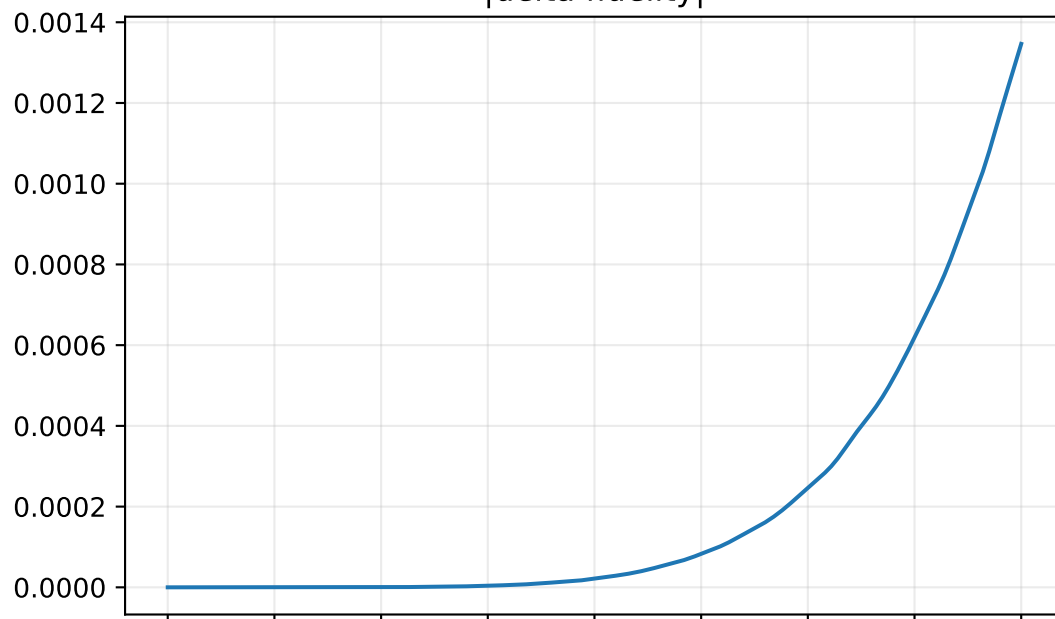


VQE is a separate quantity from the Trotter $t=0$ value; do not infer VQE energy from trajectory plots.

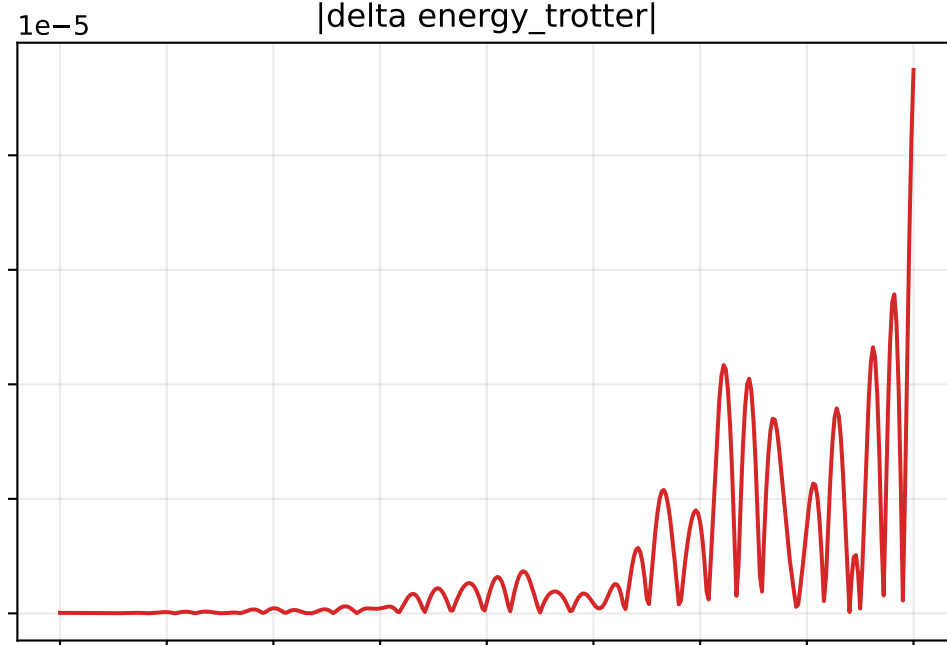


Delta Diagnostics L=3

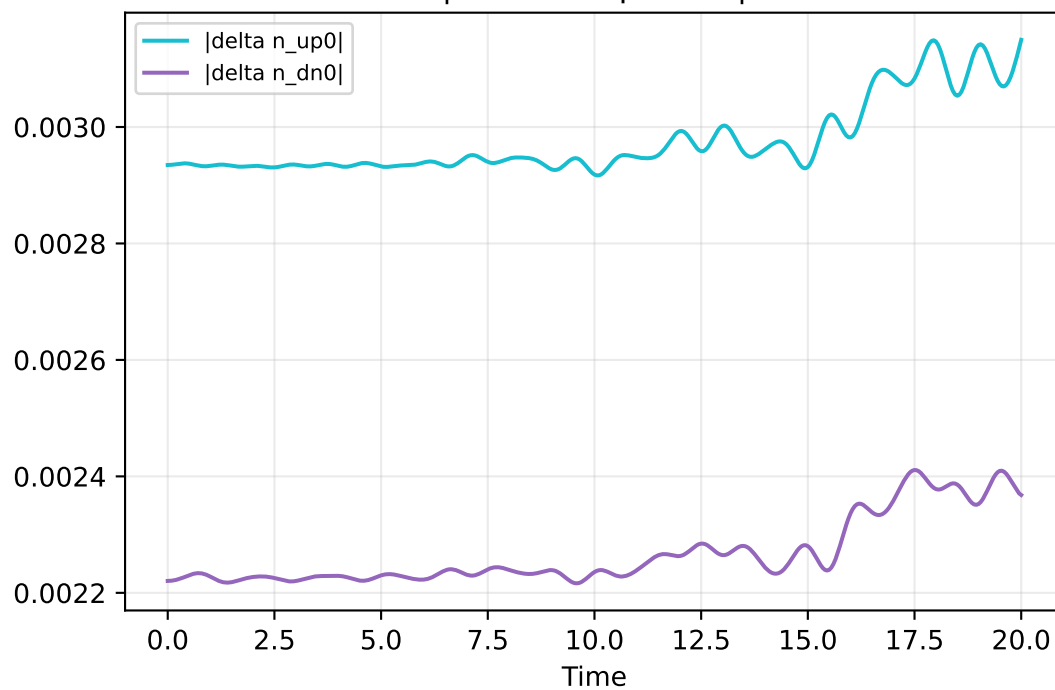
|delta fidelity|



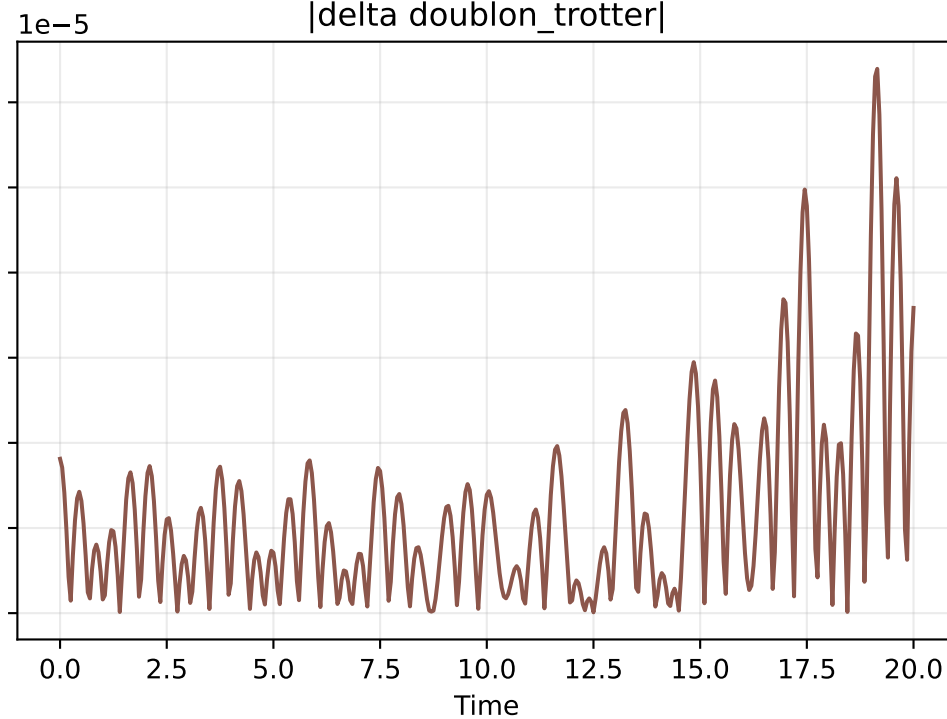
|delta energy_trotter|



|delta occupations|



|delta doublon_trotter|



L=3 metrics summary

ground_state_energy_abs_delta = 0.0

fidelity max/mean/final = 0.0013464071626839713 / 0.00019665025721909328 / 0.0013464071626839713

energy_trotter max/mean/final = 4.7458908048580994e-05 / 3.99668035453194e-06 / 4.7458908048580994e-05

n_up_site0_trotter max/mean/final = 0.0031496651890847716 / 0.002975898354829075 / 0.0031496651890847716

n_dn_site0_trotter max/mean/final = 0.0024109550934178353 / 0.00226718670337712 / 0.002368035185029038

doublon_trotter max/mean/final = 6.39293585977807e-05 / 1.1616930205037722e-05 / 3.5848731140875056e-05

checks = {'ground_state_energy_abs_delta': True, 'fidelity_max_abs_delta': False, 'energy_trotter_max_abs_delta': True, 'n_up_'
PASS = False