Fixed Error Budget and Varying Hilbert Cutoff Hilbert Cutoff $n_{max} = 10$ Hilbert Cutoff $n_{max} = 20$ 8 Hilbert Cutoff $n_{max} = 50$ Hilbert Cutoff $n_{max} = 100$ Hilbert Cutoff $n_{max} = 200$ Hilbert Cutoff $n_{max} = 500$ 6 Runtime 2 ∞ 0 50000 100000 150000 200000 0 **Physical Qubits**