Approx Ratio OAOA ADAPT QAOA 2L ADAPT VQE 2L 10^{0.0} 10^{0.0} 1000.0 10 -0.1 10-0.1 10 -0.1 0 10 20 30 40 50 8 10 3 5 6 6 4 4 Layers Layers Layers