ADAPT QAOA 2L **QAOA** 20 1.2 Mean(Grad) Mean(Grad) 12 -12 15 1.0 10 0.8 5 0.6 0 5 15 20 2 8 10 6 10 4 Layers Layers ADAPT VQE 2L VQE 1.8 2.5 Mean(Grad) Mean(Grad) -12 -12 1.6 2.0 1.4 1.5 1.2 1.0 1.0

0.5

0.0

0

100

200

Layers

300

400

8.0

0.6

1

2

3

4

Layers

5

6