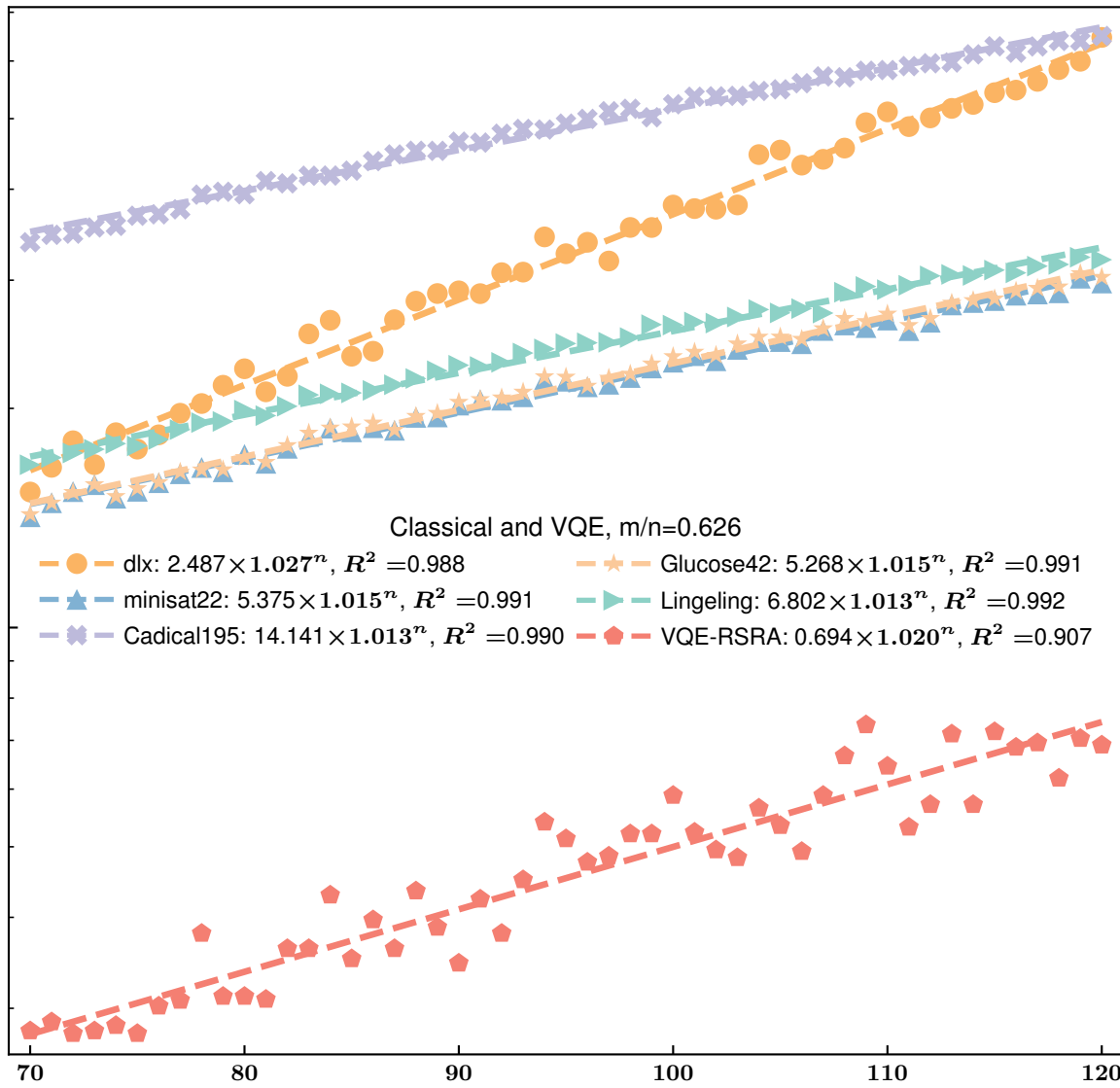


a

Time complexity

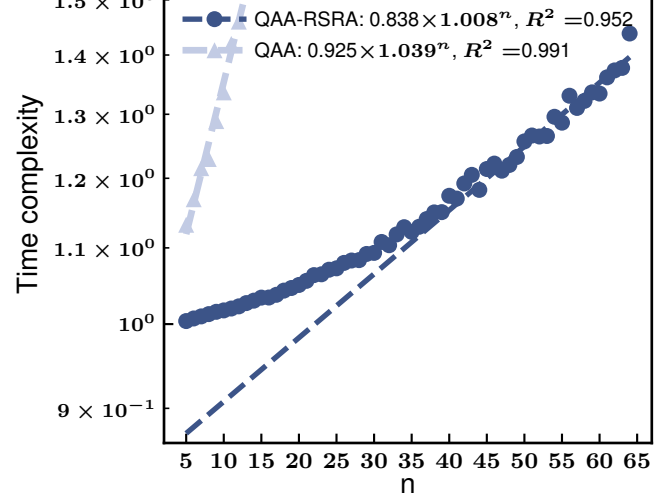
Classical and VQE,  $m/n=0.626$ 

- $\text{dlx: } 2.487 \times 1.027^n, R^2 = 0.988$       $\text{Glucose42: } 5.268 \times 1.015^n, R^2 = 0.991$   
 $\text{minisat22: } 5.375 \times 1.015^n, R^2 = 0.991$       $\text{Lingeling: } 6.802 \times 1.013^n, R^2 = 0.992$   
 $\text{Cadical195: } 14.141 \times 1.013^n, R^2 = 0.990$       $\text{VQE-RSRA: } 0.694 \times 1.020^n, R^2 = 0.907$



b

Time complexity

100 layer QAA,  $m/n=0.626$ 

c

Time complexity

25 layer QAOA,  $m/n=0.626$ 