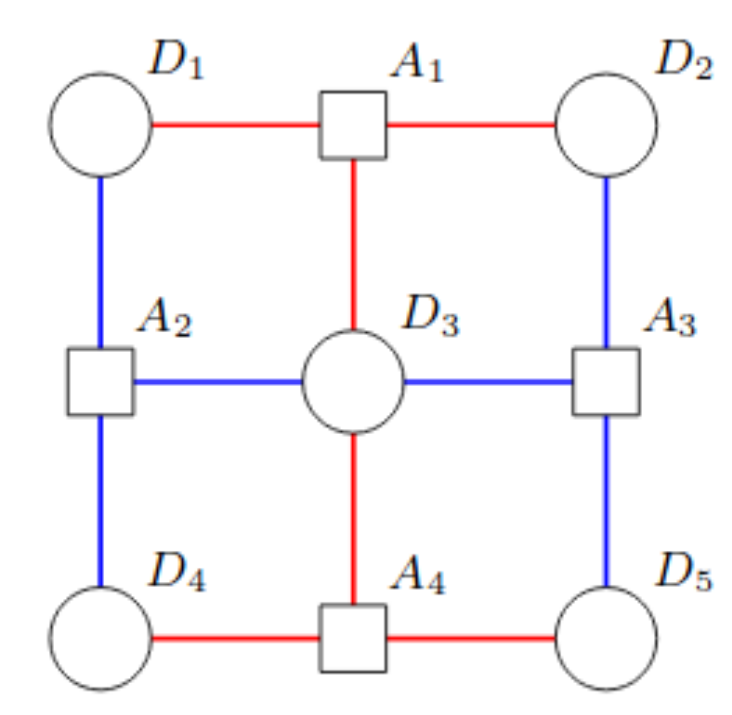
Stabilizers of $\mathcal{S}_{[[5,1,2]]}$



circles: Data Qubits

$$(\mathrm{D}_i, i = 1, 2, ..., n = 5)$$

squares: Ancillary Qubits

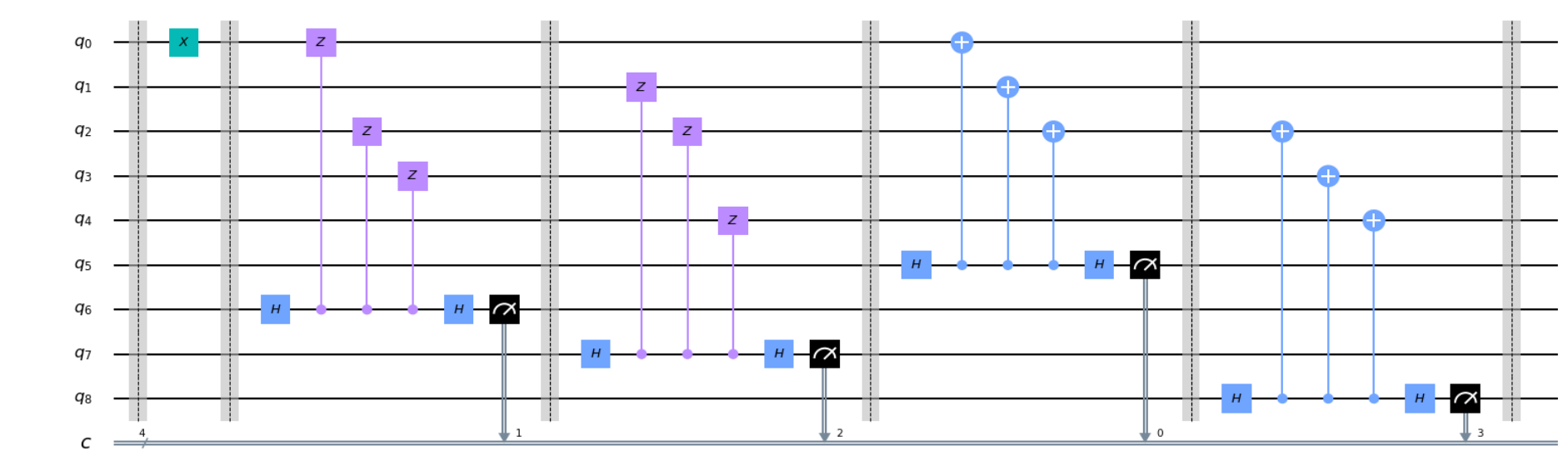
$$(\mathrm{A}_i, i = 1, 2, ..., m = n - k = 4)$$

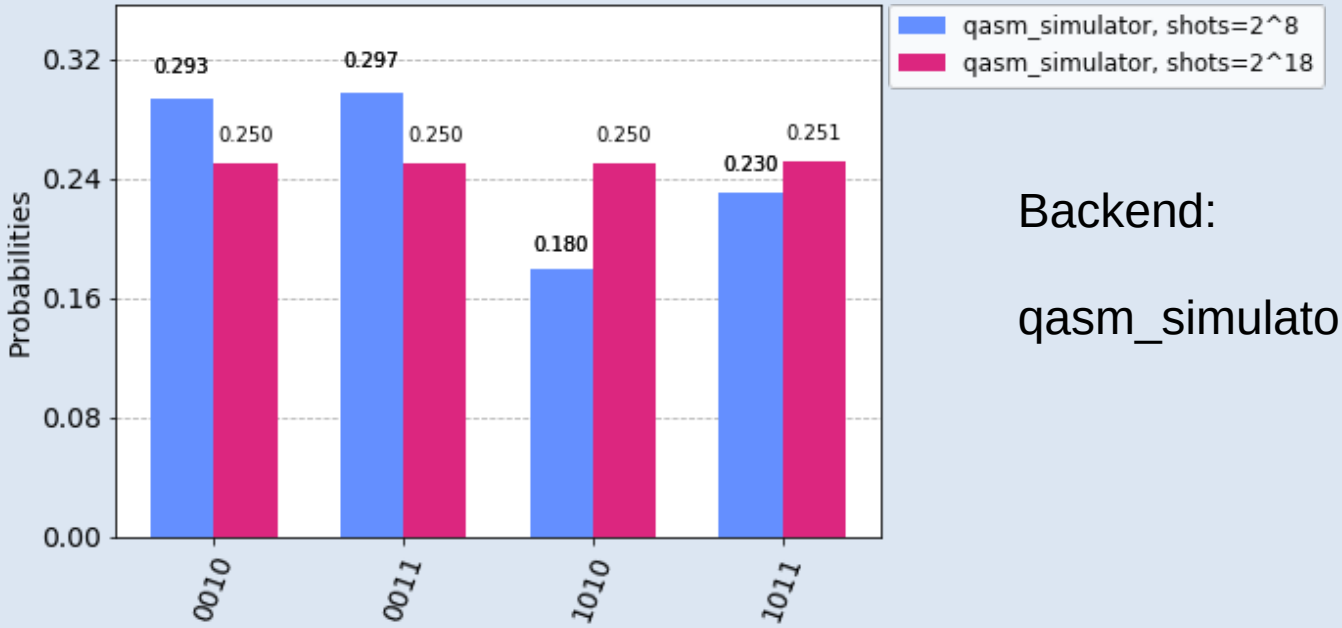
red edges: CX gate connection

blue edges: CY gate connection

(Figure from J. Roffe's review paper, Figure 8a, https://arxiv.org/pdf/1907.11157.pdf#page=18)

Stabilizers of $\mathcal{S}_{[[5,1,2]]}$

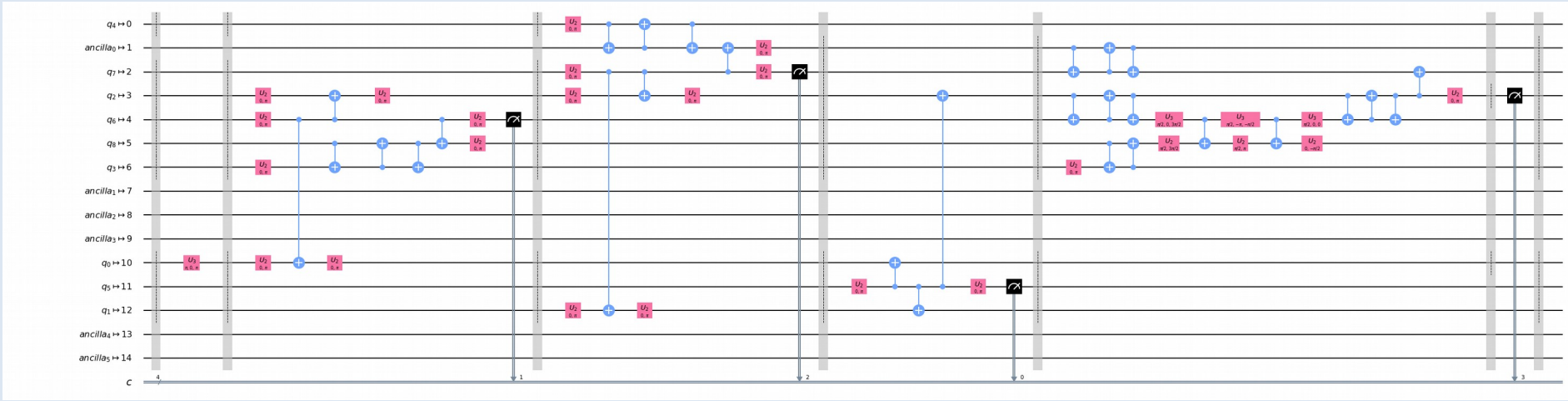


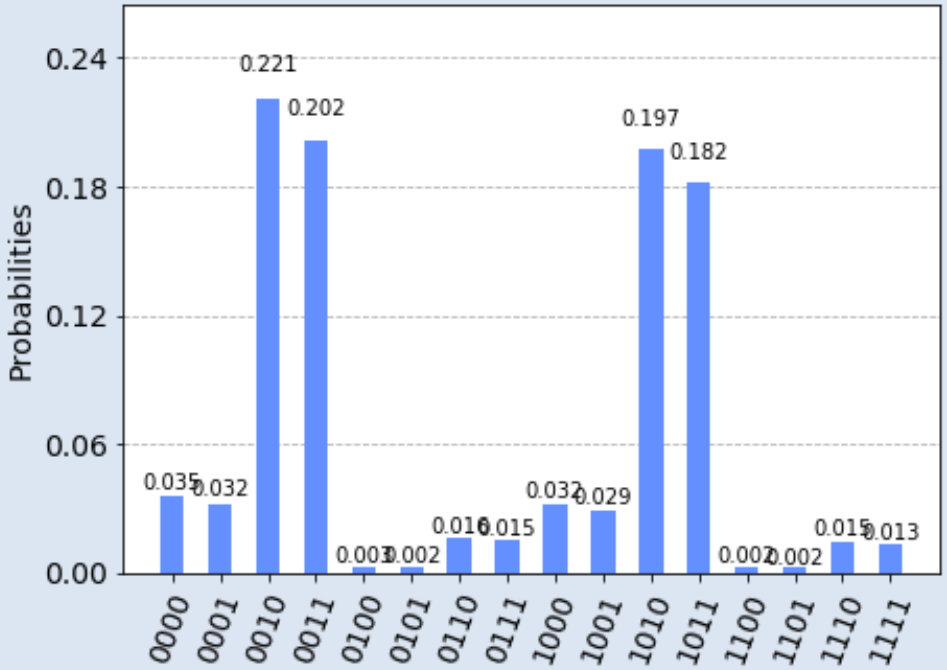


Backend:

qasm_simulator

Stabilizers of $\mathcal{S}_{[[5,1,2]]}$





Backend:

Aer simulator,
ibmq_16_melbourne noise model