Part 1

Use Quirk to construct and simulate the circuit $STHH|-\rangle$.

Note: the gates must be connected in reverse order.

- Quirk https://algassert.com/quirk

Hover the mouse over the measurement result to display the probability of being in the ON state.

Hover the mouse over the Bloch sphere to display θ, ϕ.

You can save the circuit as html: Export → Offline Copy

Part 2

Calculate $STHH|-\rangle$ by hand.

Find the probability of getting $|1\rangle$

Find the spherical coordinates θ, ϕ

Do your hand calculations agree with the results obtained from Quirk?

Submit on Canvas

- Screenshots of the quantum circuit showing the Quirk results (part 1: ON state, θ, ϕ).
- Results from part 2.