

MEASUREMENT

ADVANTAGES

1. Stable!

Able to hold a quantum state for a relatively long period of time

2. Easy long-distance communication

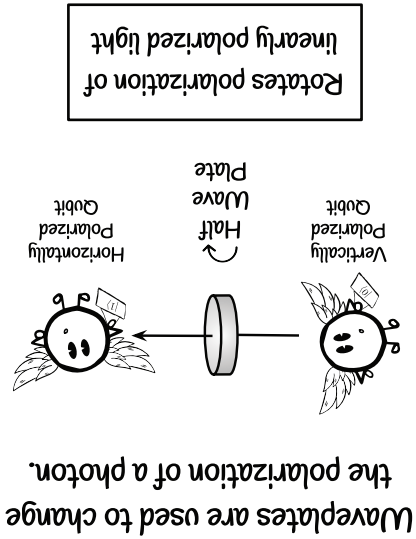
b/c photons are already moving!

3. Most components work at room temperature

Does not require large dilution refrigerators

4. Cheap long-distance communication

Compatible with existing fiber-optic networks



QUANTUM GATES

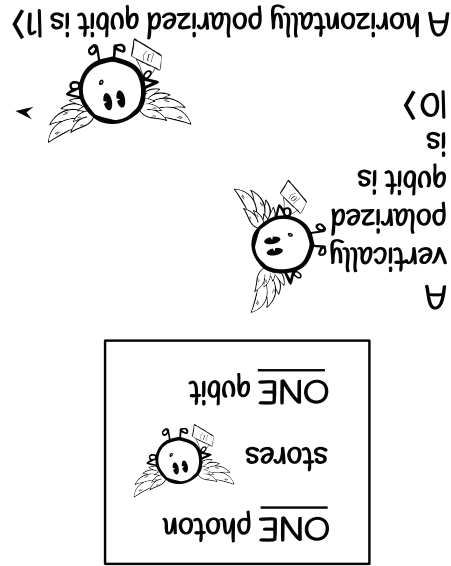
CHALLENGES

1. Time intensive!

You need to change the hardware to change the software

2. Multi-qubit gates are difficult to build

Photons do not interact with one another!



"FLYING" QUBITS

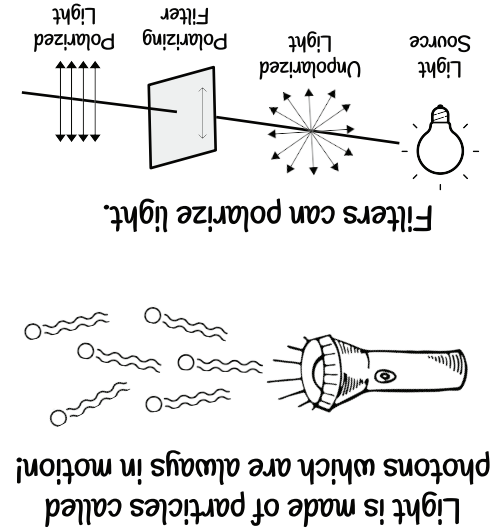
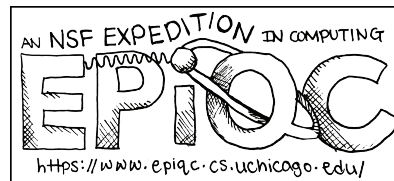
FIND MORE

QUANTUM COMPUTING ZINES HERE:

<https://www.epiqc.cs.uchicago.edu/resources/>

JANUARY 2023

This work is funded in part by EPIQC, an NSF Expedition in Computing, under grant 1730449



PHOTONS

PHOTONIC

QUANTUM COMPUTERS

