

How to hack a Chinese Quantum Satellite

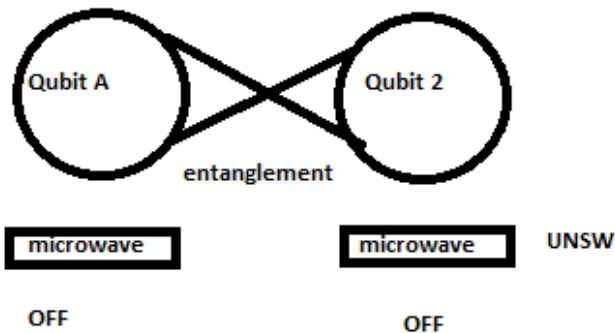
Ricardo.gil@sbcglobal.net

05/23/2017

A rule in Physics that is believed or set in stone is that a quantum satellite can't be hacked. If a peek can be made to see the spins in a system that is entangled then the entanglement in a Chinese Quantum Satellite can be peeked at (Active Quantum Measurement Proposal).

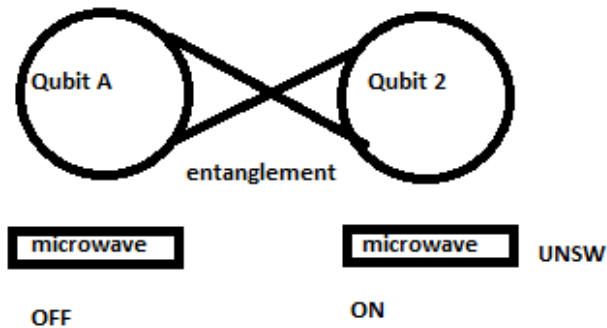
This is a proposal for quantum measurement. To do active measurement have a company like IBM create a 2 qubit entangled chip. Then create a gate(s) with microwaves (Reference UNSW). When one has the 2 qubit entangled system and applies the gate this will create an error or a deviation. To actively measure use the method to look or peek at the spins of the photons without collapsing entanglement. Reference: Julia Crammer: Qutech) In <https://www.youtube.com/watch?v=2KIGWz9dUxg> at 3:20 it shows how in quantum error correction if a spinning qubit is out of sync with the others, spin is added to it to get it back in coherence. So to actively measure let the "before state" equal X and after the gates are applied, let it equal X'. The difference or the error between X and X' is the error after the microwave gates are applied. Actively measuring with the gates applied allow for entanglement to be kept coherent. (No collapse)

X



No Error (Julia Crammer Error Correction)
Hamiltonian (Energy State of the System)

X'



Error (Julia Crammer Error Correction)
Hamiltonian (Energy State of the System)

The difference between measurement and active measurement is that with active measurement the entangled state does not collapse. In short there is no need to reset the quantum processor.

Last: Sooner or later the information will be transmitted on ground networks which can be remotely viewed.