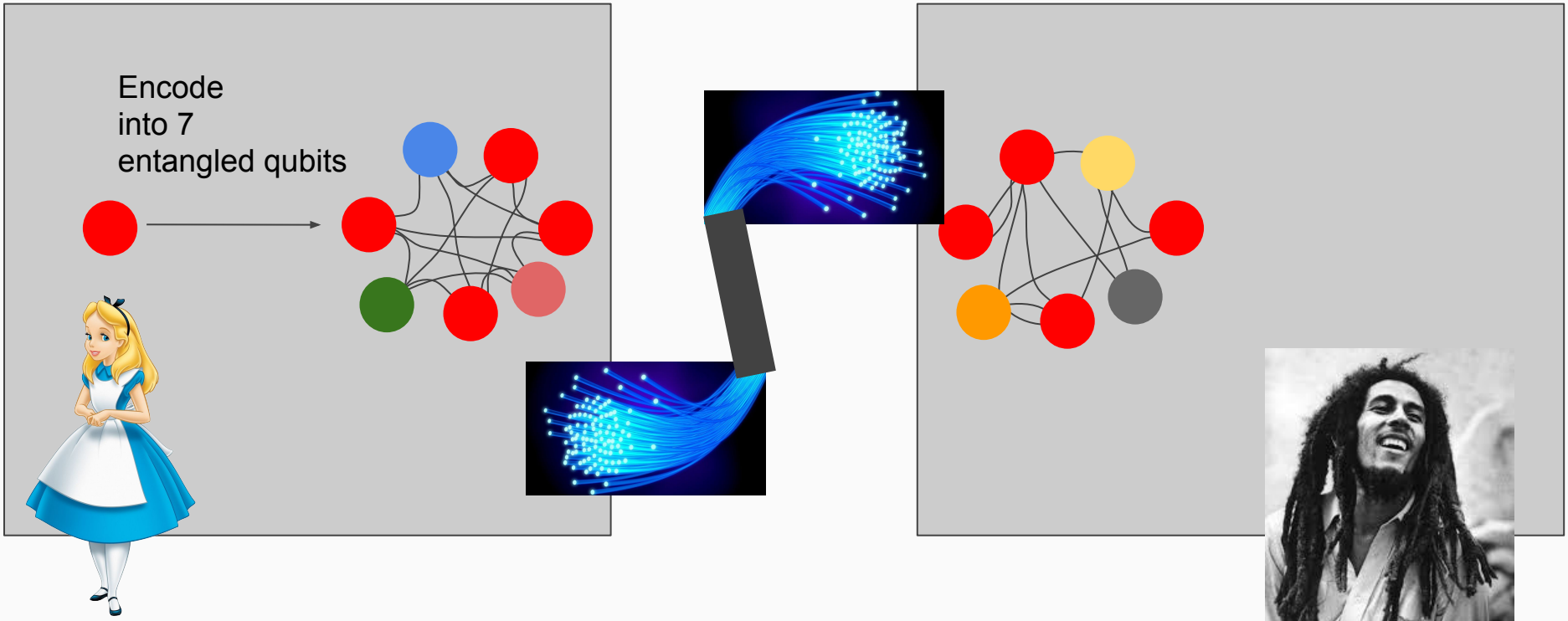
Team S.O.S.

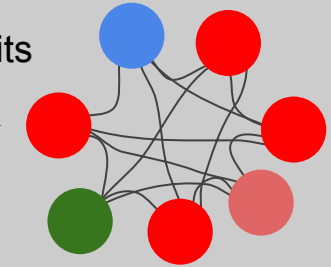
“Steane on SimulaQron”

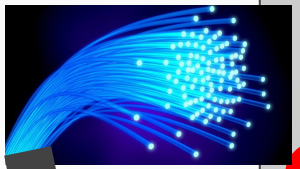
Quantum Error Correction (Steane code)

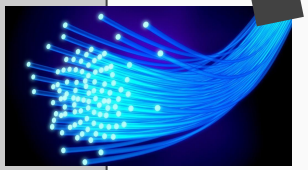


Quantum Error Correction (Steane code)

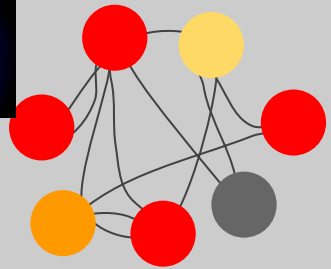
Encode
into 7
entangled qubits





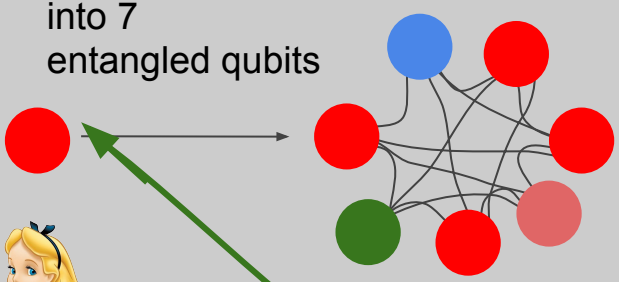


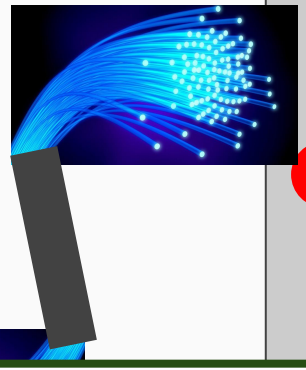
Usual: go on computing with encoded qubits
We today: decode back to 1 qubit



Quantum Error Correction (Steane code)

Encode
into 7
entangled qubits





Usual: go on computing with encoded qubits
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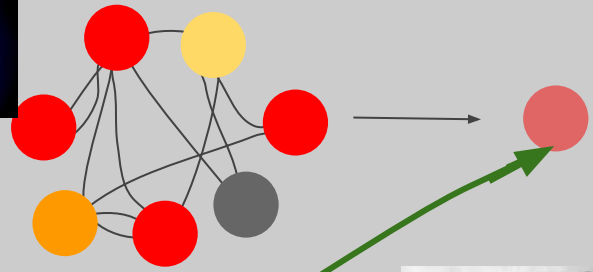
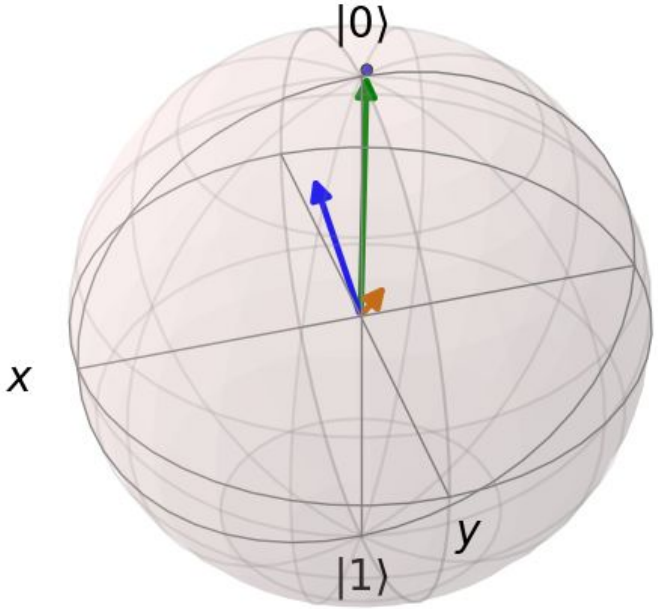


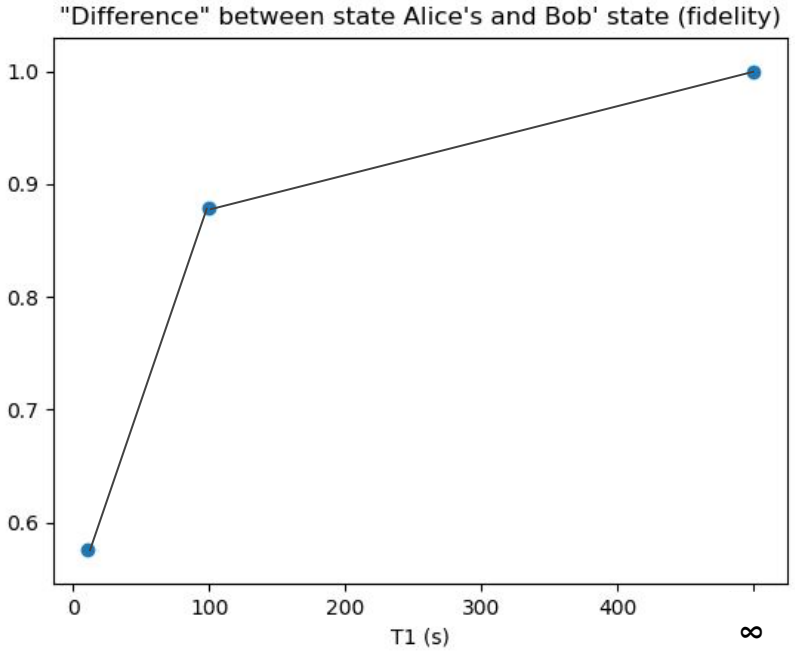
How different are these?

(*tomography*: perform this many times & let Bob measure his qubit)

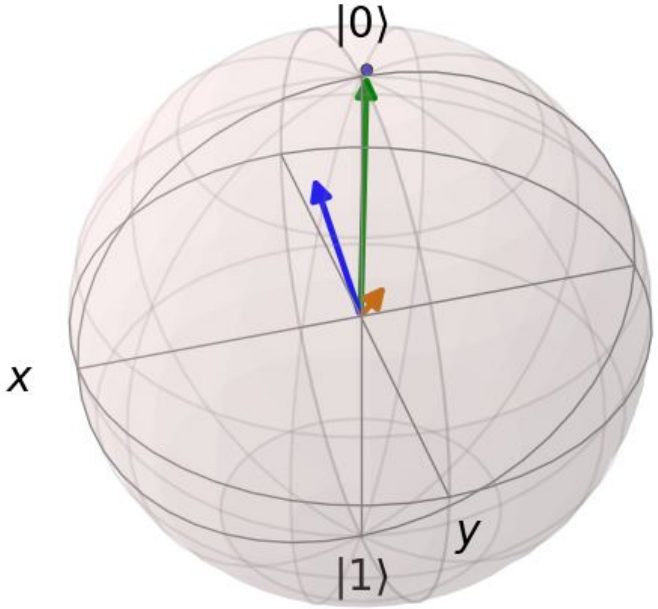
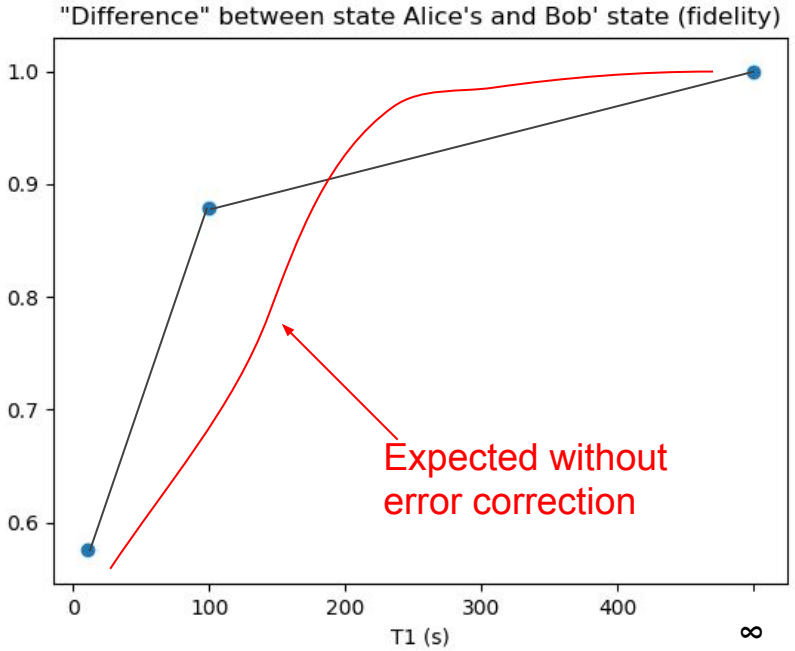
Results:



No noise
T1=100 sec.
T1=10 sec.



Results:



No noise
T1=100 sec.
T1=10 sec.