Quantum Teleportation Using W-BELL and Bell-GHZ Channels

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Abstract : Teleportation is the transfer of information between two particles without physically being in contact with each other. It has been around in Quantum computation and has been used in theoretical physics. Using the Entangled pair we can achieve teleportation up to 100% out of probable measurements. We introduce a 5-qubit general entanglement system using W-BELL and BELL-GHZ channel pairs and show its usefulness in teleportation. In this paper, we use these channels to achieve teleportation probabilistically conventionally through nonteleporting channels, which has never been achieved before. In this paper, we compare and determine which channel is better in terms of probabilistic results of teleportation of single qubits using W-Bell and Bell-GHZ channels.

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1