

Probabilistic Teleportation of Two-Particle State of General Formation

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(Received: 2001-10-8; Revised: 2001-11-20)

Abstract: A scheme for probabilistic teleporting an unknown two-particle state of general formation by partly pure entangled four-particle state is proposed. It is shown that after performing two Bell state measurements, proper unitary transformation and the measurement on an auxiliary qubit, the unknown two-particle state of general formation, which was destroyed at one place, can be reconstructed at another place with certain probability.

PACS: 03.65.Bz, 03.67.Hk

Key words: probabilistic teleportation, Bell state measurement, two-particle state of general formation

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