

Scheme for Teleportation of Four-Level Atomic States in Thermal Cavities

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Abstract: We propose a scheme for teleportation of four-level atomic states in thermal cavities. The scheme does not involve the generalized Bell-state or generalized GHZ-state measurement, which is difficult in practice. Another feature of the scheme is that it does not require individual addressing of atoms in cavity and is insensitive to both cavity decay and thermal field, which is of importance in point of experiment.

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Key words: four-level atomic state, multi-atom four-level entangled state, teleportation, single-atom measurement

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