

Transferring a Multi-atom Entangled State via Adiabatic Passage

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Abstract: We present a scheme for transferring atomic entangled states via adiabatic passage. In the scheme, we use photons to achieve efficient quantum transmission among spatially distant atoms. The probability of the successful transferring quantum state approaches 1. Meanwhile, the scheme is robust against the effects of atomic spontaneous emission.

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Key words: quantum state transfer, atomic entangled state, cavity QED

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