

Entanglement of Non-symmetric Two Charge Qubits Induced by a Damped Cavity

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(Received: 2006-5-9; Revised:)

Abstract: Two charge qubits being coupled to a damped cavity with different couplings are considered. The dynamical evolution of the entanglement between the two qubits is demonstrated analytically or numerically. It is found that with the cavity dissipation, the steady entanglement between the two qubits can be achieved. The two qubits being initially in the separable and most mixed state can be easily induced to a steady entangled state, and the relative difference of the couplings can be used to enhance the steady entanglement between the two charge qubits.

PACS: 03.67.Mn, 42.50.Dv, 03.65.Ud

Key words: charge qubit, entanglement, dissipation

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