

## Entanglement of Two Superconducting Charge Qubits Induced by Quantized Radiation Field

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(Received: 2003-10-10; Revised: )

**Abstract:** We consider two superconducting charge qubits coupled by a single-mode quantized field. We suppose that the two superconducting charge qubits be initially prepared in the mixed and separable state. As time evolves, we will investigate the entanglement between two superconducting charge qubits induced by the quantized field.

PACS: 74.50.+r, 03.67.Hk, 42.50.Dv

Key words: charge qubit, entanglement, mixed state

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