

Implementing Deutsch-Jozsa Algorithm in Cavity QED

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Abstract: We propose a simple scheme for implementing Deutsch-Jozsa algorithm in cavity QED. Our scheme is insensitive to both the cavity decay and thermal field because we use the large-detuned interaction. The scheme would be important to constructing practical computer in cavity QED system.

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Key words: Deutsch-Jozsa algorithm, cavity QED, large-detuned interaction

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