

Decoupling Bang-Bang Group for Adiabatic Decoherence Control in a Three-Level Atom

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Abstract: In this paper, we study the control problem of adiabatic decoherence in a three-level atom. We will find the decoupling bang-bang group for various configurations, including the V configuration and the cascade type of three-level atom subjected to adiabatic decoherence. We also give the programs to design a sequence of periodic twinborn pulses to suppress the decoherence.

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Key words: decoupling bang-bang group, three-level atom, adiabatic decoherence

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