

CQSE Special Seminar

Weekly Seminar
Aug. 26, 2014 (Tuesday)

TIME Aug. 26, 14:20 ~ 15:20
TITLE Effects of counter-rotating-interaction on the dynamics of spin-boson type system
SPEAKER Prof. Zhiguo Lu
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Abstract

We investigate quantum dynamics of spin-boson type systems based on unitary transformations. The main purpose is to understand the effects of counter-rotating-wave terms of the dissipation and driving on the time evolution of the system, phase transition, spectral features of the fluorescence, etc. We demonstrate the counter-rotating interactions play significant roles on the ground state and the lower lying excited states of the system. Further, the quantum dynamics without rotating wave approximation (RWA) exhibits much difference from those of RWA case.

