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Non-locality of Entangled Coherent States and Its Evolution in a Thermal Reservoir GONG Ren-Shan

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Abstract: Regarding the necessary and sufficient condition violating Bell-CHSH's inequality as criterion for non-locality of entangled states, we present a perturbative calculation determining non-locality of evolving entangled states. Furthermore, by means of the perturbative calculation, the non-locality and its evolution of two kinds of entangled coherent states in a thermal reservoir are discussed.

PACS: 03.65.Bz, 03.65.-a Key words: Bell inequality, entangled coherent states, perturbative calculation

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