

## Influence of Intrinsic Decoherence on Entanglement in Two-Qubit Quantum Heisenberg XYZ Chain

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(Received: 2004-12-16; Revised: 2005-3-2)

**Abstract:** Taking the intrinsic decoherence effect into account, we investigate the time evolution of entanglement for two-qubit XYZ Heisenberg model in an external uniform magnetic field. Concurrence, the measurement of entanglement, is calculated. We show how the intrinsic decoherence modifies the time evolution of the entanglement and find that at short-time case, concurrence is oscillating as increasing magnetic field, which implies that entanglement may be enhanced or weakened in some time regions.

PACS: 03.65.-w, 75.10.Jm

Key words: entanglement, intrinsic decoherence, Heisenberg chain

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