

Entanglement Evolution of a 2-Qutrit System Interacting with a Fermionic Bath

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Abstract: Based on the algebraic entanglement measure proposed [G. Vidal et al., Phys. Rev. A 65 (2002) 032314], we study the entanglement evolution of both pure quantum states and mixed ones of 2-qutrit system in a symmetry-broken environment consisting of a fermionic bath. Entanglement of states will decrease or remain constant under the influence of environment, and the class of states which remain unchanged has been found out.

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Key words: entanglement evolution, 2-qutrit state, fermionic bath

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