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Generation of Maximally Entangled States of Two Nonidentical Atoms in Cavity QED LI Yu-Liang, ^{1,2} ZHOU Zheng-Wei, ² PANG Chao-Yang, ² and GUO Guang-Can²

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Abstract: We have discussed the system which consists of two nonidentical two-level atoms trapped simultaneously in a large-detuned single-mode cavity field in this paper. The results show that it is possible to generate maximally entangled states for two nonidentical two-level atoms only if the cavity frequency and difference of two nonidentical atoms transition frequency are selected and the cavity-atom interacation time is controlled.

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Key words: cavity QED, maximally entangled states, limit of large detuning

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