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Erratum

Proposal for preparing entangled coherent states using atom-cavity-mode Raman interaction

K.-H. Song[1,2,3], W.-J. Zang[1], and G.-C. Guo[2]

[1] Laser Spectroscopy Lab., Anhui Institute of Optics and Fine Mechanics, Chinese Academy of Science, Hefei 230031, P.R. China
[2] Lab. of Quantum Communication and Quantum Computation, University of Science and Technology of China, Hefei 230026, P.R. China
[3] Department of Physics, Huaihua Teachers College, Huaihua, Hunan 418008, P.R. China

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We have proposed a scheme for preparing entangled coherent states using atom-cavity-mode Raman interaction. In our proposal, the relation between the cavities lifetime and the atomic state lifetime was discussed in detail. Besides, we also discussed the conditions on preparing the states. It is also pointed out that there is sufficient time to achieve our generation of the states by using Rydberg atom of long lifetime and by choosing superconducting microwave cavities with an enough high-Q factor.

However, after this paper published we become aware that a paper by Zheng [1] has presented the scheme for the generation of multi-mode Schrödinger cat states essentially using the same method. We must apologize for not being able to see the Zheng's article published in Quantum Semiclassical Optics B.

[1] S.B. Zheng, Quant. Semiclass. Opt. B **10**, 691 (1998).