

Measurement Induced Enhancement of Squeezing in Nondegenerate Two-Photon Jaynes-Cummings Model

YE Sai -Yun

Department of Electronic Science and Applied Physics, Fuzhou University, Fuzhou 350002, China
(Received: 2006-1-23; Revised: 2006-4-19)

Abstract: Squeezing properties in the nondegenerate two-photon Jaynes-Cummings model are investigated. The effects of direct selective atomic measurement and the application of the classical field followed by atomic measurement are analyzed. Different values of the parameters of the classical field are taken into account. It is found that the field squeezing can be enhanced by measurement.

PACS: 42.50.Dv

Key words: two-mode squeezing, two-photon transitions, selective atomic measurement

[\[Full text: PDF\]](#)

Close