2002 Vol.37 No.4 pp.409-412 DOI:

Conditionally Teleported States Using Optical Squeezers and Photon Counting

FAN Hong-Yi, FAN Yue, and CHENG Hai-Ling

Department of Materials Science and Engineering, University of Science and Technology of China, Hefei 230026, China
(Received: 2001-8-7; Revised:)

Abstract: By virtue of the neat expression of the two-mode squeezing operator in the Einstein, Podolsky and Rosen entangled state representation, we provide a new approach for discussing the teleportation scheme using optical squeezers and photon counting devices. We derive the explicit form of the teleported states, so that the conditional property of teleportation and teleportation fidelity of this protocol can be seen more clearly. The derivation is concise.

PACS: 03.67.Hk, 42.50.Ar, 42.50.Dv

Key words: conditionally teleported state, optical squeezer, photon counting

[Full text: PDF]

Close