

Quantum Standard Teleportation Based on the Generic Measurement Bases

HAO San-Ru,^{1,2} HOU Bo-Yu,² XI Xiao-Qiang,² and YUE Rui-Hong²

¹ Calculating Physics Division, Department of Computer Teaching, Hunan Normal University, Changsha 410081, China

² Institute of Modern Physics, Northwest University, Xi'an 710069, China
(Received: 2003-1-20; Revised: 2003-3-31)

Abstract: We study the quantum standard teleportation based on the generic measurement bases. It is shown that the quantum standard teleportation does not depend on the explicit expression of the measurement bases. We have given the correspondence relation between the measurement performed by Alice and the unitary transformation performed by Bob. We also prove that the single particle unknown states and the two-particle unknown cat-like states can be exactly transmitted by means of the generic measurement bases and the correspondence unitary transformations.

PACS: 03.67.Hk, 03.65.Bz

Key words: generic measurement bases, teleportation

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

Close