

Practicable Scheme to Generate the Three Photon Entangled State with Linear Optical Elements

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Abstract—This paper proposed practicable scheme for generation of the three photon entangled states without any non-linear optical process. The three-photon entanglement can be achieved by using linear optical elements with post selection based on the photons interferometry. The success probability of proposed method is $3/16$, higher than the previous methods using the linear optical system.

Keyword—Entangled photon, Photon interference, Optical element, Beam splitter



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