

Generation of bipartite bound entanglement

Frank E. S. Steinhoff
Universidade Estadual de Campinas

DOI: <https://doi.org/10.5196/physicae.proceedings.XIYRM.22>

Resumo

We introduce a class of entangled bipartite states that are positive under partial transposition operation, i.e., PPT bound entangled states. These states are based on realistical preparation procedures in optical systems, being thus a feasible option to generate and observe bipartite bound entanglement in high precision experiments. The method employed to detect entanglement has the advantages of being simple, analitical and independent of the range criterion. We also link PPT property of one-mode states that pass a beam-splitter to Hankel operator theory and related moment problems.