

Lamas-Linares, A.; Irvine, W. T. M.; Howell, J. C.; Bouwmeester, D.
Generalized Bell inequalities with parametric down-conversion. (English) Zbl 1152.81762
Quantum Inf. Comput. 3, Suppl., 471-479 (2003).

Summary: We analyze the suitability of states generated by stimulated parametric down-conversion for the testing of high dimensional Bell-type inequalities. Two families of bipartite inequalities are considered. For both it is found that the states are good candidates for the tests and some experimental results for one spin-1 inequality are given. The influence of noise and the possibility of supurious results are discussed.

MSC:

81P68 Quantum computation