Title:	Continuous variable quantum teleportation using non-Gaussian two mode squeezed coherent state
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Abstract:	Quantum Teleportation allows the transfer of an unknown quantum state between two distant physical systems. Here we consider the teleportation of a quantum state using various non-Gaussian entangled resource states, which are generated by a set of non-Gaussian operations on the two mode squeezed coherent (TMSC) state. To that end, we derive the Wigner characteristic function of the resource states, which is utilised in the derivation of the fidelity of teleportation. We show that coherence, defined as the amount of displacement of the vacuum state, yields better fidelity of teleportation in certain cases, when compared to non-Gaussian two mode squeezed vacuum (TMSV) state. Our analysis is very general and therefore, many previous results can be generated as a special case of our result.
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