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Title: Relation between Coherence of Quantum Ensemble and Uncertainty for a Single Observable in the case of an arbitrary amount of partial entanglement

Abstract:

The part of any partly-entangled state can be measured by the observable with uncertainty that appears in entropy uncertainty relations. Thus a quantum ensemble is obtained. Earlier the relation between coherence of the ensemble and the observable's uncertainty has been considered in a situation, where the partly-entangled state was chaotic (i.e maximally-entangled). In this work the relation is studied for an arbitrary amount of entanglement.