Joint annual meeting of Swiss and Austrian Physical Societies 2017



Contribution ID: 211

Type: Talk

[262] SLOCC hierarchy for generic states in 2 x m x n level systems

Thursday 24 August 2017 17:00 (15 minutes)

We consider entanglement in the three partite system consisting of a qubit, an *m*-level and an *n*-level system. In particular, we use tools introduced in [1] to characterize entanglement transformations under stochastic local operations and classical communication (SLOCC). We find evidence indicating that the following picture is true. In case m = n, generic states belong to one of infinitely many SLOCC classes. Surprisingly, in case $m \neq n$, generic states belong to one single SLOCC class only. Furthermore, we show that any generic state is convertible to any other generic state of lower dimension.

[1] E. Chitambar, C.A. Miller, and Y. Shi, J. Math. Phys. 51, 072205 (2010)

Authors: GACHECHILADZE, Mariami (University of Siegen); HEBENSTREIT, Martin (University of Innsbruck); GÜHNE, Otfried (University of Siegen); KRAUS, Barbara (University of Innsbruck)

Presenter: HEBENSTREIT, Martin (University of Innsbruck)

Session Classification: Theoretical Physics

Track Classification: Theoretical Physics