Accepted Manuscript

Entropic methodology for entanglement measures

Wei Deng, Yong Deng

PII: S0378-4371(18)30916-6
DOI: https://doi.org/10.1016/j.physa.2018.07.044
Reference: PHYSA 19869

To appear in: *Physica A*

Received date : 6 April 2018
Revised date : 28 June 2018

Please cite this article as:, Entropic methodology for entanglement measures, *Physica A* (2018), https://doi.org/10.1016/j.physa.2018.07.044

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights (for review)

ACCEPTED MANUSCRIPT

1) We define a universal measure of entanglement for pure, multipartite, and mixed systems based on the difference of informatic entropy.

2) We introduce the disentanglement to find the corresponding separable state for bipartite systems, and give its generalization, called partial disentanglement, for multipartite systems, which breaks the barrier that only concerns the overall entanglement of quantum system, and then concerns the entanglement of a subsystem in composite system and the entanglement between subsystems.

3) We show that our framework satisfies the basic requirements for a proper entanglement measure.

ACCEPTED MANUSCRIPT

Download English Version:

https://daneshyari.com/en/article/7374701

Download Persian Version:

https://daneshyari.com/article/7374701

Daneshyari.com