One-shot rates for entanglement manipulation under non-entangling maps

Nilanjana Datta University of Cambridge, U.K.

We introduce two relative entropy quantities called the min- and max-relative entropies and discuss their operational meanings. These relative entropies act as parent quantities for the well-known min- and max-entropies introduced by R. Renner. Moreover, they lead us to define entanglement monotones, which have interesting operational interpretations as one-shot rates of entanglement manipulation.