

HONOURS SEMINAR

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Separability Criteria and a Neighbourhood of Separable States

Friday, April 24, 2020

2:00pm

Abstract:

In quantum information theory, quantum states can be represented by positive linear functionals and their corresponding density matrices. Properties of quantum states like separability and entanglement are of interest, and criteria for determining separability of states have been widely studied. In this presentation, we review some separability criteria, and a paper of Barnum and Gurvits (2018), which discusses a neighbourhood of separable states centered around the maximally mixed density matrix $\frac{1}{n}I_n$.