



Analysis Seminar

Title: State conversion using von Neumann algebras

Speaker: Rupert Levene

Date: Tue 9th October 2018 at 4:00PM

Location: Seminar Room SCN 1.25

Abstract: Nielsen's theorem gives a simple characterisation of the pairs of pure finite-dimensional quantum states for which one may be converted to the other using 'local operations and classical communication'. We will give a mathematical introduction to this important result from quantum information theory, along with a new generalisation to an infinite-dimensional von Neumann algebraic context.

This is based on joint work with Jason Crann, David Kribs and Ivan Todorov.