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Students talks : CP reduced dynamical maps, initial correlations and commutativity

Tuesday, 20 December 2016 10:15 (15 minutes)

It is well known that a closed and isolated quantum system evolves through unitary transformations. When a quantum system of interest is not closed and isolated, but interacts with other degrees of freedom (the environment), we refer to it as an open quantum systems: in general its evolution is non unitary because of the coupling with external degrees of freedom. The mathematical framework of the reduced dynamical maps will be outlined, while the difficulties arising in the definition and construction of these mappings will be pointed out. The aim of this talk is to show the main results of (https://arxiv.org/abs/1605.04159 [arxiv.org]).

Presenter: AMATO, Giulio