

Il Dr.

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terrà un **seminario** dal titolo:

Quantum Martingale Theory and Entropy Production

Mercoledì 12 Giugno, ore 15.00 presso l'aula B, DiFC, via Archirafi 36

Tutti gli interessati, in particolare **studenti e dottorandi**, sono invitati a partecipare.

Abstract

After introducing thermodynamics along quantum jump trajectories, I will present recent results concerning the development of a martingale theory to describe fluctuations of entropy production for open quantum systems in non-equilibrium steady states. In particular, we identify a decomposition of entropy production into an exponential martingale and a purely quantum term, both obeying integral fluctuation theorems. An important consequence of this approach is the derivation of a set of genuine universal results for stopping-time and infimum statistics of stochastic entropy production. We complement the general formalism with numerical simulations of a qubit system.