Contribution ID: **5** Type: **not specified**

Collective motion and chain representation of non Markovian dynamics

Monday, 28 April 2014 14:15 (30 minutes)

Abstract: Open quantum systems are often described by a relevant system linearly coupled to an environment of independent harmonic oscillators. We show that, considering the collective motion of these oscillators, one can give an equivalent description where the environment is modeled by a chain of "collective modes" with first neighbors interaction. Such chain representation allows for a deeper understanding on the short time behavior of non Markovian quantum dynamics.

Presenter: Dr FERIALDI, Luca (LMU München)