

# Quantum dynamics and entanglement in non-Markovian systems

*Thursday, 12 September 2024 15:00 (20 minutes)*

The study of the dynamics of open quantum systems is of great importance both for the theoretical implications and for the practical applications to quantum technologies. While the Markovian regime is a good approximation in most cases, many systems and environments display a non-Markovian behavior. In this talk, I will present some work done on the dynamics of non-Markovian systems, including random unitary circuits and free fermionic ladders. Interestingly, non-Markovian systems exhibit a range of phenomena, including a transition of the entanglement, monogamy effects and more.

## Title

## Author

**Primary author:** CHIRIACÒ, Giuliano (Istituto Nazionale di Fisica Nucleare)

**Presenter:** CHIRIACÒ, Giuliano (Istituto Nazionale di Fisica Nucleare)