



### INFN Sezione di Trieste & Dipartimento di Fisica

### Joint Seminar

# **Prof. Bassano Vacchini**

### University of Milano, INFN-Milano, Italy

Tuesday April 11, 2017 – 3:00 PM - room 204, 2<sup>nd</sup> floor Dip. di Fisica – Strada Costiera, 11 – Trieste

## On the interplay between memory kernels and collisional models

Abstract. In recent times important progress has been made in the characterization and quantification of the notion of non-Markovianity for quantum dynamical evolutions. We will discuss this issue deriving in particular a large class of non-Markovian quantum dynamical maps arising as solution of memory kernel master equations. In the derivation one essentially builds on a quantization of results in classical probability theory. It appears that operator ordering plays an important role leading to a larger variety of behaviors in the quantum description. We will further show how such dynamics naturally appear within the framework of so-called collisional models.

Organizzazione a cura di: Prof. A. Bassi





#### Everyone interested in the topic is welcome to attend