

Dynamics of isolated quantum many-body systems

Interviene:

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Quantum systems in equilibrium have been extensively studied and are fairly well understood. In contrast, despite the ubiquity of non-equilibrium quantum systems, their properties are much less clear. Recently, the interest in the relaxation dynamics of these systems has increased drastically due, in part, to highly controllable new experiments with optical lattices and trapped ions. In this talk, I present numerical and analytical results for the quench dynamics of interacting quantum systems that are currently studied by the aforementioned experiments. Special attention is given to deviations from the exponential decay of the so-called survival probability. I compare the behavior of integrable and chaotic systems, as well as the behavior of systems with and without disorder.

Seminario

Giovedì 24 settembre 2015

Sala Riunioni, ore 12.00

Via dei Musei 41 - Brescia



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