



TATA INSTITUTE OF FUNDAMENTAL RESEARCH

ICTS Seminar

Title : Optimal control and shortcuts to adiabaticity in quantum systems driven out

of equilibrium

Speaker : Victor Mukherjee, Weizmann Institute of science, Israel

Date : Friday, October 21, 2016

Time : 11:00 am

Venue : Emmy Noether Seminar Room, ICTS Campus, Bangalore

Abstract : Optimal control in quantum systems is necessary to achieve various tasks,

including efficient cooling or heating of the systems, controlling

decoherence in open quantum systems, and reducing excitations generated

in a quantum system driven out of equilibrium. I will talk about optimal

control in quantum systems in presence of Markovian and non-Markovian

baths, as well as achieving local shortcuts to adiabaticity in quantum critical

systems driven out of equilibrium.

Email: academicoffice@icts.res.in Website: www.icts.res.in