

Area Seminar

Title Dynamical tunneling versus quantum coherent control

Date and Time 22/12/2014 16:00:00

Speaker Prof. Srihari Keshavamurthy

IIT, Kanpur

Area Theoretical Physics

Venue Room No. 469

Abstract Quantum coherent control is an area of active research. However, recently, studies are starting to determine the extent of quantumness needed for exerting control using external fields. At the same time, we now have a fairly detailed understanding of the process of dynamical tunneling and its mechanisms from a phase space perspective. In this talk I will present some of our recent results that establish the importance of dynamical tunneling for the coherent control scenario. Interestingly, resonance and chaos assisted tunneling can thwart simple but elegant coherent control approaches.