

Laser Field Observables

that can hardly be explained by Hermitian Quantum Mechanics

Monday, November 5, 2012

3:00 pm

Room 8335



Professor Nimrod Moiseyev
Department of Chemistry
Technion Israel Institute of Technology

In this talk, we will introduce fundamental phenomena in decaying systems unravel a variety of new effects, identify their physical observables, and propose experimental settings to observe them. The rich complex dynamics in decaying open quantum systems has always been very hard to analyze with traditional tools of quantum mechanics. Hence, many fascinating effects occurring during such processes remained unraveled. Non-Hermitian quantum mechanics offers avenues to analyze the dynamics in such systems. In principle, the new phenomena that will be described can be calculated by using the standard (hermitian) description of QM. However, they cannot be explained, predicted, or designed without the calculations of non-hermitian degeneracies (known as exceptional points).

Theoretical Chemistry Institute Seminar Series