

武汉物数所理论交叉学术交流系列报告

(第九十七期)

Lecture 1:

What can excitations do in an ultracold atom quantum gas?

Dr. Hossein Sadeghpour

ITAMP, Harvard-Smithsonian Center for Astrophysics

2014年07月15 (周二) 上午10:30-12:00

频标楼4楼报告厅

Abstract:

In this lecture, I will introduce the topic of excitation in an atomic or molecular gas and describe the fascinating features which result when highly excited atomic or molecular species interact in an ultracold trapped environment. Novel methods and devices which can be constructed for correlated many-body quantum physics and quantum information processing will be described.



About the speaker:

Senior Scientist - Harvard-Smithsonian Astrophysical Observatory

Senior Research Fellow - Harvard College Observatory

PhD: theoretical atomic and molecular physics - JILA (with Chris Greene)

Postdoc: Harvard University (with Alex Dalgarno)

Joined "Institute for Theoretical Atomic, Molecular and Optical Physics" (ITAMP) staff in 1994 as the coordinator of the Visiting Fellows and workshops program

2009 became the Deputy Director of ITAMP

2010 - now, the Director of ITAMP (guided ITAMP through its latest funding)

Current areas of research interests: Rydberg molecules; ultracold collision and spectroscopy; heating noise in ion traps, Casimir surfaces, and superconducting qubits; synthesis of large carbon molecules in interstellar medium; Rydberg formation in ultracold and astrophysical plasmas

主办单位:武汉物数所理论与交叉研究部