



清华大学高等研究院

Institute for Advanced Study, Tsinghua University

学术报告

Title: Anomalous heating in ion traps: what is it and can it be mitigated?

Speaker: Prof. H. R. Sadeghpour
ITAMP, Harvard-Smithsonian Center for Astrophysics

Time: 4:00pm, Thursday, July 24, 2014

Venue: Conference Hall 322, Science Building, Tsinghua University

Abstract

Noise is a hindrance to assembly of large scale quantum computers based on entangled trapped ions. Apart from the ubiquitous technical noise, experimental studies on trapped ions heating suffer from additionally large noise with detrimental effect on motional coherence. I will describe a microscopic model for this excess anomalous noise, which points a way towards systematic understanding of surface adsorbates as progenitors of electric field jitter noise.