



# 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.