

Lecture

Ultracold NaK Molecules in Their Absolute Ground State

Zhenkai Lu (吕振凯)

Max-Planck Institute for Quantum Optics, Germany.

2015年1月28日(周四) 上午10:30-12:00

频标楼4楼报告厅

About the speaker:

2016- Max-Planck Institute for Quantum Optics, Research associate.

2011-2015 Max-Planck Institute for Quantum Optics, Ph.D.

2008-2011 Ecole Normale Supérieure de Paris (Ulm) Master.

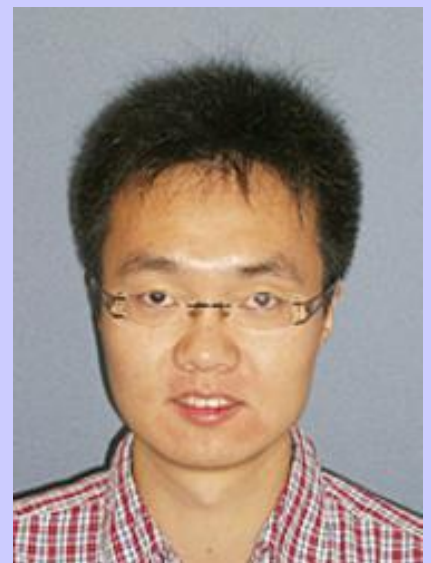
2008 Meritorious winner of US mathematical contest in modeling.

2007 First prize of Chinese mathematical contest in modeling.

2007 Chun-Tsung Scholar and Wu-Si scholarship.

2005-2008 Peking University, B.S., in Physics.

2005 First prizes in Chinese Olympiad in Physics, Informatics, Mathematics.



Abstract:

Creation of ground state ultracold polar molecules will open a door to explore fascinating quantum many body physics owing its long range dipolar interaction. In their rovibrational ground state, NaK molecules are chemically stable and possess a large electric dipole moment of 2.72 Debye. In the talk, I will report on our progress at MPQ that recently led us to the creation of NaK molecules at their ground state. I will cover the formation of Feshbach molecules, spectroscopic investigation of the molecular structure of NaK as well as the successful coherent two-photon transfer of NaK to the absolute ground state via the excited D/d manifolds.

主办单位:武汉物数所理论与交叉研究部