



## Seminar

### Quantum Simulation

**Zheng-Wei Zhou**

周正威

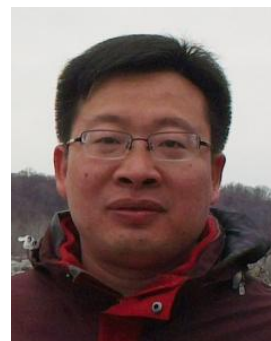
*Key Laboratory of Quantum Information, CAS  
Univ. of Scienc & Technology of China(USTC)*

**Time: 4:00pm, April 29, 2015 (Wednesday)**

**时间: 2015年04月29日 (周三) 下午4:00**

**Venue: Room W563, Physics Building, Peking University**

**地点: 北京大学物理楼 W563**



#### Abstract

As one of important applications of quantum information science, quantum simulation refers to using artificial quantum many body systems, such as atoms trapped in the optical lattice, arrays of photon-coupled microcavities, to simulate actual quantum systems or theoretical significant quantum many body models and to achieve their diversified status via manipulation for artificial systems. In this talk, we will introduce some theoretical proposals on simulating frustrated spin models and topological physics in artificial systems.

#### About the speaker

Zheng-Wei Zhou, professor in the Key Laboratory of Quantum Information, and deputy Head of Optics and Optical Engineering Department at University of Science and Technology of China (USTC). From 2007 to present, he was a professor in the School of Physical Sciences at USTC. From 2001 to 2007, He was a lecturer (2001), associate professor(2004) at the Department of Physics at USTC. He has authored and co-authored over 80 journal papers (include Nature Photonics(1), PRL(2), PRA、B(40), H index is 14). His current research interests include theoretical quantum optics and quantum information, Quantum simulation in scalable quantum systems, multipartite entanglement and many body physics.