



CSRC

**The Mini Workshop on Frontiers in Condensed
Matter Physics and Quantum Information (2014)**

Program

December 22-23, 2014

Beijing, China

2014 Mini Workshop on Frontiers in Condensed Matter Physics and Quantum Information

December 22-23, 2014, Beijing, China

The Mini Workshop on Frontiers in Condensed Matter Physics and Quantum Information will be held in Beijing on December 22-23, 2014. It is organized by the Division of Simulations of Physics, Beijing Computational Science Research Center (CSRC). The workshop aims to identify issues of current interests and explore collaborations among participants.

The 2014 workshop will focus on the following topics: (A) Many-Body Problems, (B) Quantum Information, (C) Dynamics of Open Quantum System.

List of invited speakers and the scientific program have been announced and uploaded to http://www.csrc.ac.cn/conference/MINIW_2014/. Please check relevant web pages for details.

Registration: Free (All are welcome)

Workshop language: English

Workshop Venue: No. 11 Meeting Room, 2nd Floor, Run Ze Jia Ye Hotel

Accommodation: Run Ze Jia Ye Hotel, for the directions to Beijing CSRC and the hotel, please check: http://www.csrc.ac.cn/contact/201103/t20110318_550.html

Organizing Committee: Hai-Qing LIN, Wen YANG, Wei LIU (Workshop Secretary)

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☎ 86-10-82687089 (Office); 86-13717776118 (Cell); 86-10-82687002 (Fax)

Invited Speakers

Name	Institute
Shaffique Adam	Yale-NUS College and National University of Singapore
Arun Bansil	Northeastern University, USA
Hong-Yi Chen	National Taiwan Normal University
Yan Chen	Fudan University
Yiing-Rei Chen	National Taiwan Normal University
Ya-Ping Chiu	National Taiwan Normal University
Zhong-Bing Huang	Hubei University
Xin-Qi Li	Beijing Normal University
Hai-Qing Lin	Beijing Computational Science Research Center
Ren-Bao Liu	The Chinese University of Hong Kong
Hong-Gang Luo	Lanzhou University
Lian-Ao Wu	The Basque Country University, Spain
Tao Xiang	The Institute of Physics, CAS
Jing-Bo Xu	Zhejiang University
Wen Yang	Beijing Computational Science Research Center
Jian-Qiang You	Beijing Computational Science Research Center
Yu-Zhong Zhang	Tongji University
Hang Zheng	Shanghai Jiao Tong University

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December 22, 2014 (Monday), 09:00 ~ 17:30

09:00 ~ 09:10	<i>Opening, Miscellaneous</i>	
09:10 ~ 10:00	Topological Insulators, Novel Superconductors, and 2D Atomically Thin Films Beyond Graphene	Arun Bansil
10:00 ~ 10:30	Orbital Selective Mott Transition	Yu-Zhong Zhang
10:30 ~ 11:00	<i>Tea Break</i>	
11:00 ~ 11:30	Variational Monte Carlo Study of the Nematic State in Iron-Pnictide Superconductors	Zhong-Bing Huang
11:30 ~ 12:00	Mapping Band Alignment across Heterointerfaces	Ya-Ping Chiu
12:00 ~ 14:00	<i>Lunch, Poster</i>	
14:00 ~ 14:50	Stochastic Schrödinger Equation for Open Quantum Systems	Jian-Qiang You
14:50 ~ 15:20	Symmetry Restoration and Quantumness Reestablishment	Lian-Ao Wu
15:20 ~ 15:50	Holographic Principle in Thermodynamics	Ren-Bao Liu
15:50 ~ 16:20	<i>Tea Break</i>	
16:20 ~ 16:50	Electron Transport Through Polyene Junctions in Between Carbon Nanotubes: Theoretical Study and an Ab Initio Realization	Yiing-Rei Chen
16:50 ~ 17:20	Quantum Trajectory Equation Approach to Quantum Bayesian Rule in Circuit QED and Nonadiabatic MD Simulation	Xin-Qi Li
17:30 ~	<i>Dinner</i>	

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December 23, 2014 (Tuesday), 09:00 ~ 17:30

09:00 ~ 09:50	Effect of Disorder and Interactions in Dirac Fermions	Shaffique Adam
09:50 ~ 10:20	Anisotropic Staggered Magnetization in Electron-Doped Fe-Based Superconductors	Hong-Yi Chen
10:20 ~ 10:50	<i>Tea Break</i>	
10:50 ~ 11:20	Global Phase Diagram of Layered Organic Superconductors	Yan Chen
11:20 ~ 11:50	Quantum Phase Transition in a Dissipative Two-Qubit System	Hang Zheng
11:50 ~ 14:00	<i>Lunch, Poster</i>	
14:00 ~ 14:50	Tensor Renormalization of Quantum Lattice Models	Tao Xiang
14:50 ~ 15:20	Polaron and Antipolaron in the Rabi Model	Hong-Gang Luo
15:20 ~ 15:50	Quantum Correlations and Quantum Phase Transition	Jing-Bo Xu
15:50 ~ 16:20	<i>Tea Break</i>	
16:20 ~ 16:50	Optimized Sensing with Nitrogen-Vacancy Center in Diamond	Wen Yang
16:50 ~ 17:20	<i>Open for a talk or discussion</i>	
17:30 ~	<i>Dinner</i>	

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Abstracts