



CSRC

**The Workshop on Recent Progress in Theoretical and
Computational Studies of 2D Materials**

Program

December 26-27, 2015

Beijing, China

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The Workshop on Recent Progress in Theoretical and Computational Studies of 2D Materials will be held in Beijing from December 26 to 27, 2015. It is organized by the Simulations of Physical Systems Division, Beijing Computational Science Research Center (CSRC) at its new building in Zhongguancun Software Park II.

The workshop will focus on theoretical and computational aspects of the recent progress in 2D materials. We hope that this workshop would serve as an important platform for exchange of ideas and in-depth discussions on a broad spectrum of forefront topics related to the research of low dimensional materials. It is open to scientists and graduate students in the related fields

List of invited speakers and the workshop program have been announced and uploaded to <http://www.csrc.ac.cn/en/event/workshop/2015-11-18/55.html>. Please check relevant web pages for details.

Registration Fee: 1,000 RMB (Regular Participants), 500 RMB (Posdocs&Students)

Onsite Registration:

Date	Time	Venue
December 25, 2015 (Friday)	09:00-11:30 a.m. 14:00-16:30 p.m.	Office Room A312 3rd Floor, CSRC
December 26, 2015 (Saturday)	08:30-11:30 a.m. 13:30-16:30 p.m.	Outside the Conference Room II 3rd Floor, CSRC

Workshop Venue: Conference Room II, 3rd Floor, CSRC Building

Workshop Language: English

Organizing Committee: Hai-Qing LIN, Dong-Bo ZHANG, Wei LIU (Workshop Secretary)

Enquiries: weiliu@csrc.ac.cn, dbzhang@csrc.ac.cn

☎ 86-10-56981717 (Office); 86-13717776118 (Cell); 86-10-56981700 (Fax)

Invited Speakers

Name	Institute
Kai Chang	Institute of Semiconductors (CAS)
Feng Ding	The Hong Kong Polytechnic University
Zhong Fang	Institute of Physics (CAS)
Xin-Gao Gong	Fudan University
Guang-Yu Guo	National Taiwan University
Wan-Lin Guo	Nanjing University of Aeronautics and Astronautics
Zhong-Bing Huang	Hubei University
Yan-Ming Ma	Jilin University
Zhen-Hua Qiao	University of Science and Technology of China
Xian-Gang Wan	Nanjing University
Dao-Xin Yao	Sun Yat-Sen University
Wang Yao	The University of Hong Kong
Sheng-Jun Yuan	Radboud University Nijmegen, the Netherlands
Rui-Qin Zhang	City University of Hong Kong
Wen-Qing Zhang	Shanghai University
Yu-Zhong Zhang	Tongji University
Zhen-Yu Zhang	University of Science and Technology of China
Jun-Yi Zhu	The Chinese University of Hong Kong
Liang-Jian Zou	Institute of Solid State Physics (CAS)

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Venue: Conference Room II, 3rd Floor, CSRC Home Building

December 26, 2015 (Saturday), 09:00 ~ 17:30

09:00 ~ 09:10	<i>Opening, Miscellaneous</i>	
Session I Chair: Hai-Qing Lin		
09:10 ~ 09:40	Topological Semimetals and Weyl Fermions	Zhong Fang
09:40 ~ 10:10	Emergent Gauge Field in Two-Dimensional Van Der Waals Heterostructures	Kai Chang
10:10 ~ 10:40	Valley-Spintronics in 2D Semiconductors: from Monolayer to Heterobilayers	Wang Yao
10:40 ~ 11:10	<i>Tea Break</i>	
Session II Chair: Shi-Wu Gao		
11:10 ~ 11:40	Thermal Conductivity of Two-Dimensional Material and Its Interfacial Effect	Xin-Gao Gong
11:40 ~ 12:10	<i>Ab Initio</i> Calculation of Plasmon Excitations in Graphene and Nonlinear Optical Properties of Transition Metal Dichalcogenide Monolayers	Guang-Yu Guo
12:10 ~ 14:00	<i>Lunch (CSRC Canteen, B1 Floor), Posters (Corridor, 3rd Floor)</i>	
Session III Chair: Zhi-Guo Wang		
14:00 ~ 14:30	Intrinsic and Exotic Bending Effects of Two-Dimensional Materials	Wan-Lin Guo
14:30 ~ 15:00	Structure Design of Two-Dimensional Layer Materials by CALYPSO Method	Yan-Ming Ma
15:00 ~ 15:30	The Kinetics of Low Dimensional Materials Growth	Feng Ding
15:30 ~ 16:00	<i>Tea Break</i>	
Session IV Chair: Zhong-Bing Huang		
16:00 ~ 16:30	Strong Intermolecular Orbital Interaction in Weak Interaction Systems	Rui-Qin Zhang
16:30 ~ 17:00	Surfactant Sb Enhanced Indium Incorporation on InGaN (000-1) Surface	Jun-Yi Zhu
17:00 ~ 17:30	Itinerancy-Enhanced Quantum Fluctuation of Magnetic Moments in Iron-Based Superconductors	Dao-Xin Yao
17:30 ~ 19:30	<i>Dinner (TBA)</i>	

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December 27, 2015 (Sunday), 09:00 ~ 17:00

Session I Chair: Su-Huai Wei		
09:00 ~ 09:30	Atomistic Mechanisms of Van Der Waals Homo- and Hetero-Epitaxy	Zhen-Yu Zhang
09:30 ~ 10:00	Thermal Transport in Complex Materials	Wen-Qing Zhang
10:00 ~ 10:30	<i>Tea Break</i>	
Session II Chair: Hong-Gang Luo		
10:30 ~ 11:00	Novel Magnetic and Electronic Properties of WTe ₂ and Black Phosphorus	Xian-Gang Wan
11:00 ~ 11:30	3D Dirac Semimetal Induced by Hydrostatic Pressures in Black Phosphorus	Liang-Jian Zou
11:30 ~ 12:00	Gaps in Gated Bilayer Graphene and Graphene on Boron Nitride	Yu-Zhong Zhang
12:00 ~ 14:00	<i>Lunch (CSRC Canteen, B1 Floor), Posters (Corridor, 3rd Floor)</i>	
Session III Chair: Rui-Qin Zhang		
14:00 ~ 14:30	Microscopic and Mesoscopic Modeling of 2D Materials	Sheng-Jun Yuan
14:30 ~ 15:00	In-Plane Magnetization Induced Quantum Anomalous Hall Effect in Low Buckled Honeycomb-Lattice Systems	Zhen-Hua Qiao
15:00 ~ 15:30	Electric Field Tuning of Magnetism, Exciton and Superconductivity in Bilayer Honeycomb Lattice	Zhong-Bing Huang
15:30 ~ 17:00	<i>Free Discussion</i>	
17:00 ~ 19:00	<i>Dinner (CSRC Canteen, B1 Floor)</i>	