

Journal of Physics

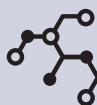
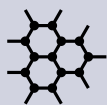
Condensed Matter

First IOP Young Researchers Meeting

on Emerging phenomena of condensed matter physics:
an atomic perspective

23–24 October 2015

M236, Institute of Physics,
Chinese Academy of Sciences, Beijing



Welcome

We are delighted to welcome you to the first Institute of Physics (IOP) **Young Researchers Meeting** on “Emerging phenomena of condensed matter physics: an atomic perspective”.

This workshop aims to build relationships between *Journal of Physics: Condensed Matter* (JPCM) and young scientists in China, raise awareness of the journal within the community, and attract submissions of high quality work from Chinese condensed matter researchers.

The workshop will introduce the students to recent developments at the frontiers of

condensed matter physics, and provide a comprehensive overview of experiments and theory, basic physics and applications. It will bring together leading scientists in the Beijing area and promote collaboration and communication between them (and within other areas of China for future workshops).

This first workshop will focus on two topics: density functional theory and 2D materials.

We hope that this will be the first in a successful series of meetings, and that you find the workshop interesting and informative.



23.10.15

Venue: M236, Institute of Physics, CAS

Chair **Lin Gu**, *Institute of Physics CAS*

08:30 **Matthew Salter**
*Associate Director, Journals,
IOP Publishing*
Opening remarks & IOP Publishing in China

08:50 **Shuyun Zhou**
Tsinghua University
Electronic structures of extended
2D materials and van der Waals
heterostructures (experimental)

09:10 **Hongming Weng**
Institute of Physics, CAS
Theoretical prediction of topological
materials

09:30 **Ying Jiang**
Peking University
Tip-enhanced inelastic electron tunneling
spectroscopy (experimental)

09:50 **Lin He**
Beijing Normal University
Gauge field and non-Abelian gauge field
in graphene (experimental)

10:10 **Photos**

10:25 **Coffee break**

10:40 **Wei Ji**
Renmin University
Tunable bandgap and exceptional
vibration coupling in environmentally
stable few-layer PtS₂

11:00 **Yong Xu**
Tsinghua University
Thermoelectric effect in topological
insulators (theoretical)

11:20 **Xi Lin**
Peking University
Transport measurements at ultra-low
temperatures (experimental)

11:40 **Sheng Meng**
Institute of Physics, CAS
Silicene on silicon

12:00 **Lunch**

Chair **Pu Yu**, *Tsinghua University*

14:00 **Ninghua Tong**
Renmin University
Equation of motion series expansion
of double time Green's function

14:20 **Yifeng Yang**
Institute of Physics, CAS
Heavy-fermion physics in d-electron
systems

14:40 **Lili Wang**
Tsinghua University
Interface enhanced electron-phonon
coupling and high temperature
superconductivity in ultrathin FeSe films
on SrTiO₃ (experimental)

15:00 **Qing Zhao**
Peking University
Self-healing of perovskite solar cells
(experimental)

15:20 **Coffee break**

15:40 **Canli Song**
Tsinghua University
Spectroscopic studies of superconductivity
in FeSe and Bi₂Sr₂CaCu₂O₈+delta
(experimental)



24.10.15

Venue: M236, Institute of Physics, CAS

16:00 **Ziyang Meng**
Institute of Physics, CAS
Interaction-drive phase transitions in correlated topological insulators

16:20 **Ji Feng**
Peking University
Dirac fermions on magnetic oxide interfaces (theoretical)

16:40 **Jinguang Cheng**
Institute of Physics, CAS
High pressure research in several topological half-metal materials

Chair **Xinzheng Li**, *Peking University*

9:00 **Yeliang Wang**
Institute of Physics, CAS
Epitaxial growth of 2D crystalline materials: silicene, germanene, hafnene and PtSe₂

9:20 **Zheng Liu**
Tsinghua University
First-principles study of several S=1/2 kagome compounds (theoretical)

9:40 **Zhimin Liao**
Peking University
Transport properties of low-dimensional Dirac materials (experimental)

10:00 **Tian Qian**
Institute of Physics, CAS
Experimental discovery of Weyl semimetal TaAs

10:20 **Coffee break**

10:40 **Xiulai Xu**
Institute of Physics, CAS
Manipulating the carrier wavefunctions in single quantum dots

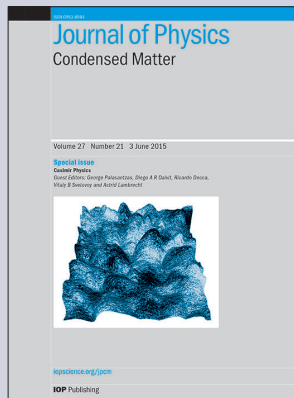
11:00 **Ke He**
Tsinghua University
Thickness dependence of the quantum anomalous Hall effect (experimental)

11:20 **Jianhao Chen**
Peking University
Nonlinear transport measurement of graphene in the quantum Hall regime (experimental)

11:40 **Lin Gu**
Institute of Physics, CAS

Close of the workshop

About JPCM



JPCM is IOP Publishing's flagship condensed matter journal, and receives over 1.2 million downloads per year. The journal covers all areas of condensed matter, including 2D materials and soft matter.

We publish experimental, theoretical and simulation studies, and recently launched a new section dedicated to reporting of novel methods. **From 2016 we will be introducing Letters as a new article type. These will be short (6 page limit), high quality articles reporting a significant advance in a particular field.**

Authors in JPCM can benefit from the following:

- **Fast publication times** – receipt-to-acceptance times of 70 days for regular papers
- **High visibility** – 1.2 million downloads to JPCM per year
- **High impact** – impact factor of 2.346
- Excellent author service
- A chance to promote their work on our homepage with a LabTalk piece
- Top papers feature in IOPselect

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