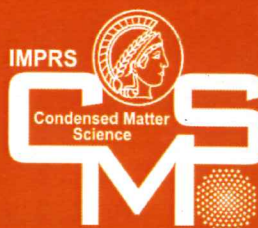


The 2nd Joint Workshop on Condensed Matter Science

Peking University & IMPRS
November 14-18, 2016, Beijing (China)



ICQM PKU



Time	Event
Nov. 14, Monday Morning	Session 01: Correlated-Electron Materials (I) Session Chair: Nanlin Wang
8:30 – 9:30	Registration
9:30 – 10:00	Opening Ceremony
10:00 – 10:50	Hidegori Takagi (MPI) Spin-orbit Coupling Meets with Electron Correlations – A Guided Tour to Exotic Electronic States of 5d Transition Metal Oxides
10:50 – 11:25	Liling Sun (IOP) Exotic Phenomena in Pressurized Superconducting Materials
11:25 – 12:00	Jian Wang (PKU) Discovery of Quantum Griffiths Singularity in 2D superconductors and Detection of Topological Superconductivity by Hard Point Contact
12:00 – 1:40	Lunch
Nov. 14, Monday Afternoon	Session 02: Transport and Advanced Spectroscopy Session Chair: Qi Song
1:40 – 2:30	Wei Han (PKU) Spin and Charge Conversion in 2D Quantum Materials
2:30 – 3:05	Yongqing Li (IOP) Dephasing-related Electron Transport in 3D Topological Insulators
3:05 – 3:50	Coffee Break + Workshop Photo
3:50 – 4:25	Yan Zhang (PKU) Distinctive Electronic Phase Diagram of Electron-doped FeSe Studied via <i>in-situ</i> Surface Doping
4:25 – 5:00	Nanlin Wang (PKU) Two CDW Amplitude Modes with Extremely Small Energy Scales in LaAgSb ₂ Identified with Ultrafast Optical Spectroscopy
5:00 – 5:25	Yi Lu (MPI) Resonant Inelastic X-ray Scattering in Hole-doped Cuprate Superconductors

Time	Event
Nov. 15, Tuesday Morning	Session 03: Correlated-Electron Materials (II) Session Chair: Matthias Joerg Hepting
9:00 – 9:50	Bernhard Keimer (MPI) Higgs Mode and Its Decay in a Two-dimensional Antiferromagnet
9:50 – 10:25	Dirk Manske (MPI) Higgs Spectroscopy of Superconductors in Non-equilibrium
10:25 – 10:50	Coffee Break
10:50 – 11:25	Xiaosong Wu (PKU) Thermoelectric Signature of the Chiral Anomaly in Cd ₃ As ₂
11:25 – 12:00	Fa Wang (PKU) Compass Impurity in Iridates: Tb Substitution of Ir in Sr ₂ IrO ₄
12:00 – 1:40	Lunch
Nov. 15, Tuesday Afternoon	Session 04: Two-dimensional Materials Session Chair: Jingjing Niu
1:40 – 2:40	Introduction to the IMPRS PhD Program
2:40 – 3:15	Haiming Guo (IOP) Tunable Inter-atomic Spin Coupling in Artificial Manganese Clusters Registered on Graphene
3:15 – 3:40	Chaoyi Cai (PKU) Tunable Negative Magnetoresistance in Hydrogenated Graphene
3:40 – 4:05	Coffee Break
4:05 – 4:40	Jurgen Smet (MPI) On-chip Reversible Intercalation in Uncovered Bilayer Graphene
4:40 – 5:15	Kaihui Liu (PKU) Growing Graphene Single Crystals faster
Nov. 16, Wednesday Morning	Session 05: Quantum Detection and Control of Quantum Properties Session Chair: Xiaodong Cao
9:00 – 9:50	Clifford Hicks (MPI) Correlated Electron Materials under Uniaxial Pressure
9:50 – 10:25	Yuan Li (PKU) Prominent Role of Spin-Orbit Coupling in FeSe Revealed by Inelastic Neutron Scattering

Time	Event
10:25 – 10:50	Coffee Break
10:50 – 11:40	Hong Ding (IOP) Emergent Fermions in Solid State Universes
11:40 – 12:15	Xinzheng Li (PKU) Influence of Nuclear Quantum Effects on the Superconducting Behavior of H_3S
12:15 – 2:00	Lunch
Nov. 16, Wednesday Afternoon	Session 06: Topological Materials and Ideas Session Chair: Ying Xing
2:00 – 2:35	Xincheng Xie (PKU) Dephasing and Disorder Effects in the Topological Systems
2:35 – 3:10	Yong Xu (THU) Topological Quantum States of Electrons and Phonons: New Materials and Applications
3:10 – 3:45	Andreas Rost (MPI) Inverse Perovskites - A New Platform for the Physics of 3D Dirac Electron Materials
3:45 – 4:10	Coffee Break
4:10 – 4:45	Chen Fang (IOP) Nonsymmorphic Nodal Line and Dirac semimetals
4:45 – 5:10	Cheung Chan (PKU) Chiral Majorana Modes Protected by an Emergent 4D Topological Invariant
5:10 – 5:35	Chenglong Zhang (PKU) Single Crystal Growth and Superconducting Properties of Topological Nodal Semimetal $PbTaSe_2$
Nov. 17, Thursday Morning	Session 07: Scanning Tunneling Microscopy Session Chair: Wenbin Rui
9:00 – 9:50	Xi Chen (THU) Engineered Quantum Materials: A Surface Scientist's Perspective
9:50 – 10:25	Christian Ast (MPI) The Josephson Effect in Scanning Tunneling Microscopy: Exploring the Quantum Nature of the Tunneling Effect
10:25 – 10:50	Coffee Break
10:50 – 11:15	Qingyu He (MPI) Spectroscopic Imaging STM Study on Dirac Line Node Material $ZrSiS$
11:15 – 11:40	Jing Guo (PKU) Quantum Nature of Protons in Water Probed by Scanning Tunneling Microscopy and Spectroscopy
11:40 – 1:30	Lunch

Time	Event
Nov. 17, Thursday Afternoon	Session 08: Ultrafast Spectroscopy Session Chair: Gennadii Laskin
1:30 – 2:05	Stefan Kaiser (MPI) Ultrafast Optical Control of Complex Quantum Materials
2:05 – 2:35	Biao Wu (PKU) Wannier Functions in Non-periodic Systems
2:35 – 2:55	Nikolaj Bittner (MPI) Induced Superconductivity in the Hubbard Model
2:55 – 3:15	Qinsheng Wang (PKU) Ultrafast Broadband Photodetectors Based on Three-dimensional Dirac Semimetal Cd_3As_2
3:15 – 4:30	Coffee Break + Poster Session (on the 1 st floor)
4:30 – 6:00	Lab Tour in the Physics East Building
Nov. 18, Friday Morning	Session 09: Quantum Transport Session Chair: Xiaotian Zhang
9:00 – 9:35	Chi Zhang (PKU) Quantum Capacitance Anomalies of 2-Dimensional Electron System under Microwave Irradiation
9:35 – 10:10	Ryuichi Shindou (PKU) Theory of Transport Properties in Density Wave Phases in Three-dimensional Metal/Semimetal under High Magnetic Field
10:10 – 10:35	Johannes Geurs (MPI) Investigating Electronic Transport in Graphene at the Van Hove Singularity
10:35 – 11:00	Coffee Break
11:00 – 11:25	Andreas Gauss (MPI) A Scanning Single-electron Transistor Array Microscope Working below 40 mK to Probe the Hall Potential Distribution in the $\nu=2/3$ Fractional Quantum Hall State
11:25 – 11:50	Pengjie Wang (PKU) Anomalous Behavior of the $N=2$ Bubble States in a Tilted Field
11:50 – 12:00	Closing Remarks
12:00 – 1:40	Lunch
Nov. 18, Friday Afternoon	Free Time for Additional Discussion

Scientific Organizers

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