

International Workshop on
Quantum Phenomena Emerging at Heterointerfaces of
Transition Metal Compounds
June 14th-15th, 2017 Beijing
Scientific Program

Wednesday, June 14 th , Meeting Room 236, Building M, IOP, CAS	
09:00-09:10	Welcome Speech
09:10-10:30	Session 1 Chair: E. Ward Plummer
09:10-09:40	George Albert Sawatzky (<i>University of British Columbia</i>) Replica Bands in 2D Electron Gases on Ionic Insulators
09:40-10:10	Jian Shen (<i>Fudan University</i>) Stable Intermediate Phase in Photoinduced Metal-to-insulator Transition
10:10-10:30	Coffee Break and Photo

10:30-12:00	Session 2 Chair: Jiandi Zhang
10:30-11:00	Pu Yu (<i>Tsinghua University</i>) Electric-field Control of Tri-state Phase Transformation with Selective Dual-ion Switch
11:00-11:30	Hao Yang (<i>Nanjing University of Aeronautics and Astronautics</i>) Vertical Interface Engineering in Oxide Nanocomposite Thin Films
11:30-12:00	Zhicheng Zhong (<i>Ningbo Institute of Materials Technology and Engineering, CAS</i>) Band Alignment and Charge Transfer at Complex Oxide Interfaces
12:00	Lunch Break (IOP Restaurant)

14:00-16:20	Session 3 Chair: Jian Shen
14:00-14:30	Qikun Xue (<i>Tsinghua University</i>) On the Pairing Mechanism of Unconventional High Temperature Superconductivity
14:30-15:00	E. Ward Plummer (<i>Louisiana State University</i>) Predicting Hidden Bulk Phases from Surface Phases in Bilayered $\text{Sr}_3\text{Ru}_2\text{O}_7$
15:00-15:30	Yuefeng Nie (<i>Nanjing University</i>) In Situ Observation of Layer-by-layer Mean Inner Potential Oscillations and Precise Growth Control of Oxide Interfaces
15:30-16:00	Hongming Weng (<i>Institute of Physics, CAS</i>) Ferroelectric Distortion Driven Weyl Semimetal in Oxide HgPbO_3
16:00-16:20	Coffee Break

16:20-17:20	Session 4 Chair: Pu Yu
16:20-16:50	Ke Zou (<i>Yale University</i>) Revealing Topological States at a Hybrid Oxide Chalcogenide Interface
16:50-17:20	Xuetao Zhu (<i>Institute of Physics, CAS</i>) Observation of An Anomalous Acoustic Surface Plasmon from Topologically Protected States
18:00	Banquet (Liaoning International Hotel)

Thursday, June 15 th , Meeting Room 236, Building M, IOP, CAS	
09:00-10:50	Session 5 Chair: Donglai Feng
09:00-09:30	Jak Chakhalian (<i>Rutgers University</i>) Designer Polar Metal Magnetic and 2D Electron Gas
09:30-10:00	Jiandi Zhang (<i>Louisiana State University</i>) Interface-induced Spontaneous Magnetic Reversal Behavior
10:00-10:30	Hongxin Yang (<i>Ningbo Institute of Materials Technology and Engineering, CAS</i>) First Principles Insights on Exchange Splitting in Graphene Induced by Magnetic Insulator Proximity and Large Perpendicular Magnetic Anisotropy at Co/graphene Interface
10:30-10:50	Coffee Break

10:50-11:50	Session 6 Chair: Lin Gu
10:50-11:20	Yoshiharu Krockenberger (<i>NTT Basic Research Laboratories</i>) From Molecular Beam Epitaxy to High Magnetic Field Quantum Oscillations
11:20-11:50	Donglai Feng (<i>Fudan University</i>) Search and Study of Thin Superconductor Films
12:00	Lunch Break (IOP Restaurant)

14:00-16:30	Session 7 Chair: Jak Chakhalian
14:00-14:30	Chungang Duan (<i>East China Normal University</i>) When Multiferroics Meets Valleytronics—Emergent Phenomena in Ferrovalley Materials
14:30-15:00	Shaolong He (<i>Ningbo Institute of Materials Technology and Engineering, CAS</i>) Electronic Structures of Hafene Revealed by ARPES
15:00-15:30	Lin Gu (<i>Institute of Physics, CAS</i>) Probing Structure and Electronic Structure of Functional Oxides at Atomic Scale by Scanning Transmission Electron Microscopy
15:30-16:00	Zhiming Wang (<i>Ningbo Institute of Materials Technology and Engineering, CAS</i>) Probing Electron-phonon and Electron-plasmon Interactions in Oxide 2D Electron Liquids by ARPES
16:00-16:30	Chen Ge (<i>Institute of Physics, CAS</i>) Manipulating Physical Properties via Oxygen Vacancies in Complex Oxide Films
16:30	Closing Remarks