International Workshop on

Surfaces and Interfaces of Quantum Materials

June 11th-12th, 2018 Beijing

Scientific Program

Monday, June 11th, Meeting Room 236, Building M, IOP, CAS	
09:00-09:10	**Welcome Speech**
09:10-10:30	**Session 1** **Chair: Jiandong Guo**
09:10-09:40	**Peter Littlewood** *(University of Chicago)* Metal-insulator Transitions in Elastic Media
09:40-10:10	**Jiandi Zhang** *(Louisiana State University)* Manipulating Oxide Film Properties Through Growth Tuning
10:10-10:30	Coffee Break and Photo

10:30-12:00	**Session 2** **Chair: Jiandi Zhang**
10:30-11:00	**Jak Chakhalian** *(Rutgers University)* Adventures in Topology and Correlations
11:00-11:30	**Karsten Held** *(Vienna university of technology)* Probing the Topological Nature of SmB_6 by Dynamical Mean Field Theory
11:30-12:00	**Donglai Feng** *(Fudan University)* Scanning Tunneling Spectroscopy Studies of Topological Superconductivity
12:00	Lunch Break

14:00-16:20	**Session 3** **Chair: Jimin Zhao**
14:00-14:30	**Ward Plummer** *(Louisiana State University)* Intricacies of Electron and Structural Phase Transitions in the Transition Metal Dichalconenides $IrTe_2$
14:30-15:00	**Xucun Ma** *(Tsinghua University)* Experimental Search and Spectroscopic Study of Interface Superconductors
15:00-15:30	**Yoshiharu Krockenberger** *(NTT Basic Research Laboratories)* Infinite Layer Cuprates: Exigence Towards Higher T_c
15:30-16:00	**Jianmin Zuo** *(University of Illinois)* Progress in Aberration Corrected Electron Microscopy for Interfacial Strain and Point Defects Characterization
16:00-16:20	Coffee Break

16:20-17:50	**Session 4** **Chair: Yanwei Cao**
16:20-16:50	**Kuijuan Jin** *(Institute of Physics, CAS)* Coexistence of Polar Distortion and Metallicity in Doped $PbTiO_3$, $SnTiO_3$, and Strain-engineered $BaTiO_3$
16:50-17:20	**Jinxing Zhang** *(Beijing Normal University)* Emerging Interfacial Magnetism in Ruthenate Heterostructures
17:20-17:50	**Hangwen Guo** *(Fudan University)* Tailoring Interface-induced Magnetic Polar Metal Phase in Complex Oxides

Tuesday, June 12th, Meeting Room 236, Building M, IOP, CAS	
09:00-10:50	**Session 5** **Chair: Zhiming Wang**
09:00-09:30	**Zhicheng Zhong** *(Ningbo Institute of Materials Technology and Engineering, CAS)* Spin Direction Controlled Electronic Band Structure in Two Dimensional Ferromagnetic Materials
09:30-10:00	**Zhigao Sheng** *(High Magnetic Field Laboratory of Chinese Academy of Science)* Electronic Glass and Crystals in the Manganite Thin Films
10:00-10:30	**Erjia Guo** *(Oak Ridge National Laboratory)* Revealing the Hidden Magnetic Oxide Interfaces by Polarized Neutron Reflectometry
10:30-10:50	Coffee Break

10:50-11:50	**Session 6** **Chair: Jak Chakhalian**
10:50-11:20	**Thorsten Schmitt** *(Paul Scherrer Institut)* Resonant Inelastic X-Ray Scattering on Confined Vanadate and Strained Iridate Films
11:20-11:50	**Jimin Zhao** (*Institute of Physics, CAS*) Ultrafast Quasiparticle Dynamics and Electron-phonon Coupling in $(Li_{0.84}Fe_{0.16})OHFe_{0.98}Se$
12:00	Lunch Break

14:00-15:50	**Session 7** **Chair: Zhigao Sheng**
14:00-14:30	**Nianpeng Lu** *(Tsinghua University)* A Protonated Brownmillerite Electrolyte for Superior Low-temperature Proton Conductivity
14:30-15:00	**Zhiming Wang** *(Ningbo Institute of Materials Technology and Engineering, CAS)* APRES Study Metal-insulator Transition in $SrIrO_3$ Heterostructures Grown by Pulsed Laser Deposition
15:00-15:30	**Zhaoliang Liao** *(University of Science and Technology of China)* Structure Modulation Doping in Correlated Oxide Heterostructure
15:30-15:50	Coffee Break

15:50-17:20	**Session 8** **Chair: Ward Plummer**
15:50-16:20	**Yanwei Cao** *(Ningbo Institute of Materials Technology and Engineering, CAS)* The Bottlenecks and Opportunities of 2DEG in Oxide Interfaces
16:20-16:50	**Shuyuan Zhang** (*Institute of Physics, CAS*) The Role of Interfacial Dynamic Polarons in the Superconductivity Enhancement of FeSe on $SrTiO_3$
16:50-17:20	**Zhen Wang** (*Louisiana State University, Baton Rouge & Brookhaven National Laboratory*) Atomic Resolved Crystal Structure of Superconducting $Ca_{10}Pt_4As_8((Fe_{1-x}Pt_x)_2As_2)_5$
17:20	**Closing Remarks**