

**2024 The 11<sup>th</sup> International Workshop on  
Surfaces and Interfaces of Quantum Materials  
June 6<sup>th</sup>-7<sup>th</sup>, Beijing**

***Scientific Program***

<b>June 6<sup>th</sup> (Thursday), Meeting Room 236, Building M</b>	
<b>09:00-11:00</b>	<b>Session 1</b> <b>Chair: Jiandong Guo</b>
09:00-09:10	Welcome Speech
09:10-09:40	<b>Haifeng Du</b> ( <i>High Magnetic Field Laboratory, HFIPS, CAS</i> ) Realization and manipulation of topological magnetic textures
09:40-10:10	<b>Woo Seok Choi</b> ( <i>Sungkyunkwan University</i> ) Ruthenate Superlattices
10:10-10:40	<b>Xiaodong Cui</b> ( <i>University of Hong Kong</i> ) Exciton polarization in 2D TMDs
10:40-11:00	Break and Photo

<b>11:00-12:00</b>	<b>Session 2</b> <b>Chair: Lingfei Wang</b>
11:00-11:30	<b>Shuai Dong</b> ( <i>Southeast University</i> ) Altermagnetism
11:30-12:00	<b>Pu Yu</b> ( <i>Tsinghua University</i> ) A correlated ferromagnetic polar metal by design
12:00	Lunch

<b>14:00-15:50</b>	<b>Session 3</b> <b>Chair: Xiaoran Liu</b>
14:00-14:30	<b>Yanwu Xie</b> ( <i>Zhejiang University</i> ) Superconducting quantum oscillations and anomalous negative magnetoresistance in nano-patterned LaAlO <sub>3</sub> /KTaO <sub>3</sub> interface
14:30-15:00	<b>Danfeng Li</b> ( <i>City University of Hong Kong</i> ) Kinetic-based Materials Approaches to Novel Nickelates
15:00-15:30	<b>Banabir Pal</b> ( <i>Max Planck Institute of Microstructure Physics, Halle (Saale), Germany</i> ) Josephson diode effect from Cooper pair momentum in a topological semimetal
15:30-15:50	Break

<b>15:50-17:20</b>	<b>Session 4</b> <b>Chair: Zhaoliang Liao</b>
15:50-16:20	<b>Choongyu Hwang</b> ( <i>Pusan National University</i> ) Tuning physical properties via chemical potential
16:20-16:50	<b>Zheng Wen</b> ( <i>Qingdao University</i> ) Structure-evolution-designed amorphous oxides for dielectric energy storage
16:50-17:20	<b>Yuanhua Lin</b> ( <i>Tsinghua University</i> ) Ultrahigh energy performance in multilayer ceramic capacitors by domain interface design
17:20	Banquet

<b>June 7<sup>th</sup> (Friday), Meeting Room 236, Building M</b>	
<b>09:00-10:50</b>	<b>Session 5</b> <b>Chair: Pu Yu</b>
09:00-09:30	<b>Zheng Han</b> ( <i>Shanxi University</i> ) Fractional quantum Hall in n-type semiconductor MoS <sub>2</sub>
09:30-10:00	<b>Cheng Song</b> ( <i>Tsinghua University</i> ) Spin-charge interconversion in Mn <sub>2</sub> Au films
10:00-10:30	<b>Peng Yan</b> ( <i>University of Electronic Science and Technology of China</i> ) Nonlinear topological magnon spin Hall effect
10:30-10:50	Break

<b>10:50-11:50</b>	<b>Session 6</b> <b>Chair: Jinxing Zhang</b>
10:50-11:20	<b>Jingdi Zhang</b> ( <i>Hong Kong University of Science and Technology</i> ) Photo-induced hidden states in quantum materials
11:20-11:50	<b>Shinbuhm Lee</b> ( <i>Daegu Gyeongbuk Institute of Science &amp; Technology(DGIST)</i> ) Hydrogen-driven low-temperature topotactic transition in nanocomb cobaltite for ultralow power ionic-magnetic coupled applications
11:50	Lunch

14:00-16:00	<p style="text-align: center;"><b>Session 7</b></p> <p style="text-align: center;"><b>Chair: Di Yi</b></p>
14:00-14:30	<p><b>Mingmin Yang</b> (<i>Hefei National Laboratory</i>) Symmetry engineering and emergent effects at oxide interfaces</p>
14:30-15:00	<p><b>Yangyang Li</b> (<i>Shandong University</i>) Emergent Quantum Phases in Correlated Oxide Films</p>
15:00-15:30	<p><b>Xiaoran Liu</b> (<i>Institute of Physics, CAS</i>) Emergent magnetic and topological phenomena in pyrochlore iridate thin films</p>
15:30-16:00	<p><b>Gang Chen</b> (<i>Peking University</i>) Topological textures and surface fractionalization at heterostructure interfaces</p>
16:00	Closing Remarks