

**2023 The 10th International Workshop on
Surfaces and Interfaces of Quantum Materials
June 7th-9th, Beijing**

Scientific Program

June 8th (Thursday), Meeting Room 234, Building M	
08:30-10:30	Session 1 Chair: Erjia Guo
08:30-08:40	Welcome Speech
08:40-09:10	Jian Shen (Fudan University) Title: Oxides spintronics
09:10-09:40	Jingsheng Chen (Singapore National University) Title: Perovskite Oxide Materials for Spin-orbitronics
09:40-10:10	Junling Wang (South University of Science and Technology of China) Title: Controlling Magnetization with Electric Field
10:10-10:30	Break and Photo

10:30-12:00	Session 2 Chair: Xiaoran Liu
10:30-11:00	Ryo Noguchi (California Institute of Technology) Title: Floquet-driven coherent phonon generation in a layered antiferromagnet MnPS ₃
11:00-11:30	Salvador Lopez (University of Arkansas), Online Title: 2D ferroelectrics and multiferroics
11:30-12:00	Cuizu Chang (Pennsylvania State University) Title: Electrical Switching of the Edge Current Chirality in Quantum Anomalous Hall Insulators

12:00	Lunch
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14:00-15:50	Session 3 Chair: Hanghui Chen
14:00-14:30	Michele Kotigua (EPFL, Switzerland) Title: Determining structural prototypes from first-principles
14:30-15:00	D. D. Sarma (Indian Institute of Science), Online Title: Layer-resolved electronic structure in oxide heterostructures
15:00-15:30	Sokrates Pantelides (Vanderbilt University), Online Title: Emergent quantum vibrations in nanostructures – atomic-resolution microscopy and theory
15:30-15:50	Break

15:50-17:20	Session 4 Chair: Yanwei Cao
15:50-16:20	Chen Ge (IOP, CAS) Title: Photo-induced non-volatile VO ₂ phase transition for neuromorphic UV sensors
16:20-16:50	Tianxiang Nan (Tsinghua University) Title: Magnon Spin Transport in Spinel Ferrite Thin Films
16:50-17:20	Yunzhong Chen (IOP, CAS) Title: Tunable conducting oxide interfaces with giant Rashba spin-orbit coupling.
17:20	Banquet

June 9th (Friday), Meeting Room 234, Building M	
08:30-10:20	Session 5 Chair: Xiaofang Zhai
08:30-09:00	Xiao Wang (Nanyang Technology University) Title: Integrating perovskite oxides and layered materials towards high performance electronics
09:00-09:30	Yu Ye (Peking University) Title: Probing the layer-number-dependent magnetic states of the MnBi ₂ Te ₄ family
09:30-10:00	Garrit Beuer (Kavli Institute for Theoretical Sciences) Title: Magnons and Ferrons in Thin Films and at Surfaces
10:00-10:20	Break

10:20-11:50	Session 6 Chair: Di Yi
10:20-10:50	Xuefeng Wang (Nanjing University) Title: Light control of emergent phenomena at the interfaces of correlated oxides
10:50-11:20	Miao Liu (IOP, CAS) Title: Atomly.net: paving a data-centric high-way for materials science
11:20-11:50	Nianpeng Lu (IOP, CAS) Title: Ionic Gating Induced Strong Ion–Electron–Lattice Coupling and Electronic Antidoping in Correlated Oxide Materials
11:50	Lunch

14:00-15:30	Session 7 Chair: Hangwen Guo
14:00-14:30	Lingfei Wang (University of Science and Technology of China) Title: Super-tetragonal Sr ₄ Al ₂ O ₇ : a versatile sacrificial layer for high-integrity freestanding oxide membranes
14:30-15:00	Liang Si (Northwest University) Title: Room-temperature ferromagnetism and ordering of oxygen vacancies in SrTiO _{2.5}
15:00-15:30	Liang Qiao (University of Electronic Science and Technology) Title: Critical Role of Hydrogen in Nickelate Superconductivity
15:30	Closing Remarks