

Agenda of the Quantum Matter and Quantum Information Symposium

- Wenhua Hall, Hangzhou Narada Resort & Spa Liangzhu -
- 杭州良渚君澜酒店, 文华厅 -

October 26th, Tuesday, Day 1

08:30-08:40 Welcome Remarks

Session I

Chair: Fuchun Zhang (University of Chinese Academy of Sciences/ The University of Hong Kong)

08:40-10:00

Lecture 1 Topological Physics in Iron-Based Superconductors

Speaker 1: Jiangping Hu (Institute of Physics CAS)

Long-Range Mutual Quantum Entanglement and Mechanism of High- T_c Superconductivity

Speaker 2: Zhengyu Weng (Tsinghua University)

10:00-10:20

Photo Taking / Refreshment Break

Session II

Chair: Fuchun Zhang (University of Chinese Academy of Sciences/ The University of Hong Kong)

10:20-12:20

Lecture 3 (巡游电子与磁性自由度相互作用的实验展现)

Speaker 3: Donglai Feng (University of Science and Technology of China)

Lecture 4 (复杂体系量子物态的超快调控和时间分辨光谱探测)

Speaker 4: Nanlin Wang (Peking University)

Cuprate High-Temperature Superconductivity in the Extreme Two-Dimensional Limit

Speaker 5: Yuanbo Zhang (Fudan University)

12:20-13:30

Buffet & Lunch Break

Session III

Chair: Zhenyu Zhang (University of Science and Technology of China)

13:30-15:30

Iron-Based Superconductors as a New Majorana Playground

Speaker 6: Hong Ding (Institute of Physics CAS)

Quantum Transport Phenomena in $MnBi_2Te_4$ Antiferromagnetic Topological Insulators

Speaker 7: Yayu Wang (Tsinghua University)

Giant Anomalous Nernst effect in Magnetic Topological Semimetals

Speaker 8: Zhu'an Xu (Zhejiang University)

October 27th, Wednesday, Day 2**Session IV** Chair: Ruirui Du (Peking University)08:30-10:30 **Exploiting Quantum Plasmonics for Enhanced Functionalities of Low-Dimensional Heterostructures**

Speaker 9: Zhenyu Zhang (University of Science and Technology of China)

Ferrovalley, Half-Valley and Supervalley Materials

Speaker 10: Chungang Duan (East China Normal University)

Determining the Range of Magnetic Interactions from the Relations Between Magnon Eigenvalues at High-Symmetry k Points

Speaker 11: Xiangang Wan (Nanjing University)

10:30-10:50 Refreshment Break

Session V Chair: Ruirui Du (Peking University)10:50-12:10 **Phonon Magnetic Moment and Chirality: Electronic Geometrical Phase Effect**

Speaker 12: Qian Niu (University of Texas at Austin/University of Science and Technology of China)

Universal Topological Quantum Computation with Strongly Correlated Majorana Edge Modes

Speaker 13: Yue Yu (Fudan University)

12:10-13:30 Buffet & Lunch Break

Session VI Chair: Qian Niu (University of Texas at Austin/University of Science and Technology of China)13:30-15:30 **Merits of and Challenges in Semiconductor-Based Majorana Platform**

Speaker 14: Ruirui Du (Peking University)

Determination of the Fractionalized Spin Excitations in Magnetically Ordered States via Entanglement Entropy

Speaker 15: Jianxin Li (Nanjing University)

Non-Fermi Liquid and Unconventional Superconductivity: Intrinsic Properties of an Emergent Bose Liquid

Speaker 16: Wei Ku (Shanghai Jiao Tong University)

15:30-15:50 Refreshment Break

Session VII Chair: Jianxin Li (Nanjing University)15:50-17:50 **Exceptional Surface in a Pseudo-Hermitian Magnon Polariton System**

Speaker 17: Ke Xia (Beijing Computational Science Research Center)

Polaron Picture for the Quantum Rabi and Related Models

Speaker 18: Honggang Luo (Lanzhou University)

Exploring the Nucleon Structure at Fermi Scale

Speaker 19: Hongxi Xing (South China Normal University)