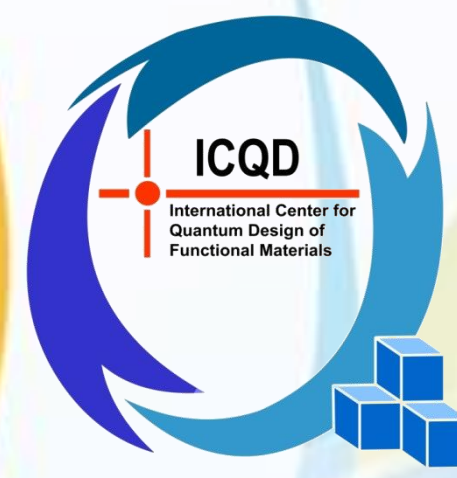


HFNL



ICQD

2nd ICQD Young Scientists' Forum on Quantum Matters: From Predictive Design to Materialization

Scientific Advisory Committee: Zhenyu Zhang, Jinlong Yang, Zijing Lin, and Xianhui Chen

Organizing Committee: Zhenhua Qiao, Wenguang Zhu, and Hualing Zeng

30 May

- 08:30-08:40 Zhenyu Zhang (USTC)
Welcome remarks
Chair: Zhenhua Qiao (USTC)
- 08:40-09:20 Xiongjun Liu (Peking University)
Emergent topology and symmetry-breaking order in correlated quench dynamics
- 09:20-10:00 Rui Yu (Wuhan University)
电子线路中设计拓扑新物态
- 10:00-10:20 **Coffee break & Photo time**
Chair: Ping Cui (USTC)
- 10:20-11:00 Qinglin He (Peking University)
Topology and Antiferromagnetic Proximity Interactions at (Bi, Sb)₂Te₃-based Interfaces
- 11:00-11:40 Shifei Qi (Hebei Normal University)
n-p 共掺杂拓扑绝缘体和石墨烯中量子反常霍尔效应和 Rashba 自旋劈裂研究
- 11:40-12:20 Changan Zeng (USTC)
Antiferromagnetic Dirac semimetal & Weyl semiconductor
- 12:20-14:00 Lunch
Chair: Wenguang Zhu (USTC)
- 14:00-14:40 Haizhou Lu (SUSTech)
3D Quantum Hall Effect
- 14:40-15:20 Jiamin Xue (ShanghaiTech University)
接触式扫描隧道显微镜方法的发展与应用
- 15:20-16:00 Yingtao Zhang (Hebei Normal University)
Crossed Andreev reflection in topological superconductor junctions
- 16:00-16:20 **Coffee break**
Chair: Shengyong Qin (USTC)
- 16:20-17:00 Jianhao Chen (Peking University)
Conventional and in-situ quantum transport measurement of two-dimensional materials
- 17:00-17:40 Hua Jiang (Soochow University)
石墨烯拓扑界面态的研究
- 17:40-18:20 Zhigao Sheng (中国科学院强磁场科学中心)
Pre-ferroelectric state in SrTiO₃ crystals

31 May

- Chair: Jin Zhao (USTC)*
- 08:30-09:10 Wei Ji (Renmin University of China)
Interlayer magnetic coupling mechanism in CrI₃ and CrX₂ (X = S, Se, Te) bilayers
- 09:10-09:50 Wenzhong Bao (Fudan University)
二维半导体材料的微电子器件和晶圆级集成电路研究
- 09:50-10:30 Wei Ren (Shanghai University)
二维材料的电子结构计算和物性调控
- 10:30-10:50 **Coffee break**
Chair: Hualing Zeng (USTC)
- 10:50-11:30 Chen Fang (Institute of Physics, CAS)
New invariants, complete classification and fast diagnosis for topological crystalline insulators
- 11:30-12:10 Tao Wu (USTC)
A spin-orbital intertwined nematic state in FeSe
- 12:10-12:20 Xianhui Chen (USTC)
Concluding remarks

Time: Morning, 30 May

Venue: Exhibition Hall, HFNL

Time: Afternoon 30 & Morning 31 May

Venue: Room 9004, HFNL

Sponsors:

- ◆ International Center for Quantum Design of Functional Materials (ICQD), Hefei National Laboratory for Physical Sciences at the Microscale (HFNL)
- ◆ Key Laboratory of Strongly-Coupled Quantum Matter Physics, Chinese Academy of Sciences
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