Hong Kong Forum of Physics 2022: Frontiers of Quantum Materials Research

Organized by Area of Excellences on "2D Materials Research" & HKU-UCAS Joint Institute of Theoretical and Computational Physics

QR code for registration

December 12 – 15, 2022 (Monday - Thursday)
Lecture Theatre 4 - 5, 1/F, Meng Wah Complex, HKU and Online (Hybrid Mode)

Announcement

Quantum materials research has given us deeper understandings of the quantum behavior of the materials and provided great promises for realizing quantum devices with new functionalities that operates with the principles of the quantum physics. There have been many important discoveries and progresses recently. We organize this forum to bring together the active researchers in the field to share their new findings and ideas in Hong Kong.

The main topics of the conference include:

- Quantum electron transport in low-dimensional materials
- Quantum many-body phenomena and fluctuations
- Quantum valley and spin physics
- Non-trivial superconductivity and magnetism
- Light-matter interactions in quantum materials
- Synthesis and engineering of quantum materials
- Physics and applications of quantum devices

Organizing Committee

Dongkeun Ki (HKU) (Chair), **Wang Yao** (HKU) (Co-chair)
Maohai Xie (HKU), **Xiaodong Cui** (HKU)
Ning Wang (HKUST) , **Sen Yang** (HKUST)

The forum is supported by

1. **Croucher Foundation**
2. **Area of Excellence on "2D Materials Research: Fundamentals Towards Emerging Technologies"**
3. **HKU-UCAS Joint Institute of Theoretical and Computational Physics, and HK Institute of Quantum Science & Technology**

For enquiries, please contact Miss Mandy Tse at mandymyt@hku.hk

Invited Speakers

Marc Bockrath
(The Ohio State University)
Yang Chai
(The Hong Kong Polytechnic University)
Wen-Hao Chang
(Academia Sinica)
Sungjae Cho
(KAIST)
Xiaodong Cui
(The University of Hong Kong)
Hui Deng
(University of Michigan)
Xiangfeng Duan
(University of California, Los Angeles)
Vladimir Fal'ko
(National Graphene Institute of UK)
Nicolas Fang
(The University of Hong Kong)
Wei-Bo Gao
(Nanyang Technological University)
Jianhua Hao
(The Hong Kong Polytechnic University)
Yoshihiro Iwasa
(University of Tokyo & RIKEN)
Jinfeng Jia
(SUSTech and Shanghai Jiaotong University)
Jeanie Lau
(The Ohio State University)
Kam Tuen Law
(The Hong Kong University of Science and Technology)
Gil-Ho Lee
(POSTECH)
Ting-Kuo Lee
(National Tsing Hua University)
Dangyuan Lei
(City University of Hong Kong)
Lain-Jong (Lance) Li
(The University of Hong Kong)
Xiaoqin Li
(The University of Texas at Austin)
Hai-Qing Lin
(Zhejiang University)
Kian Ping Loh
(The Hong Kong Polytechnic University)
Zi Yang Meng
(The University of Hong Kong)
Vinod Menon
(City University of New York)
Feng Miao
(Nanjing University)
Alberto Morpurgo
(University of Geneva)
Qian Niu
(University of Science and Technology of China)
Shunqing Shen
(The University of Hong Kong)
Su-Fei Shi
(Rensselaer Polytechnic Institute)
Chih-Kang Shih
(The University of Texas at Austin)
Jian Wang
(Shenzhen University)
Sanfeng Wu
(Princeton University)
Fengnian Xia
(Yale University)
Di Xiao
(University of Washington)
Xincheng Xie
(Peking University)
Qihua Xiong
(Tsinghua University)
Jianbin Xu
(The Chinese University of Hong Kong)
Xiaodong Xu
(University of Washington)
Peide Ye
(Purdue University)
Ting Yu
(Wuhan University)
Yuanbo Zhang
(Fudan University)
Zhenyu Zhang
(University of Science and Technology of China)