

Concurrent session 4: Condensed Matter Physics

Friday, July 27, 2018

14:00 – 18:15	Concurrent session 4: Condensed Matter Physics
Venue:	Anthony Lau Building (E4), E4-1052
Chairpersons:	1. Daoxin Yao 2. Wei Ji
14:00 – 14:25	Keynote presentation
	Role of interlayer coupling in tuning structural and magnetic properties of 2D few-layers Wei Ji, Renmin University of China. MC: Daoxin Yao
14:25 – 16:10	Invited presentations
14:25 – 14:40	Topological valley-chiral edge states of Lamb waves in elastic thin plates Jun Mei, South China University of Technology. MC: Daoxin Yao
14:40 – 14:55	Global phase diagram of doped-Mott insulator on honeycomb lattice: A Grassmann tensor product state approach Zhengcheng Gu, The Chinese University of Hong Kong. MC: Daoxin Yao
14:55 – 15:10	Bilayer graphene with Rashba spin-orbital coupling and staggered sublattice potentials: topological phase and topological zero-line mode Ma Luo, Sun Yat-sen University. MC: Daoxin Yao
15:10 – 15:25	Gapless edge states of 2D symmetry-protected topological phases: field theories, lattice models, and numerics Chenjie Wang, City University of Hong Kong. MC: Daoxin Yao
15:25 – 15:40	Multi-scale Time Dependent Density Functional Theory for Field Electron Emission Weiliang Wang, Sun Yat-sen University. MC: Daoxin Yao
15:40 – 15:55	Self-learning Monte Carlo method and cumulative update Junwei Liu, Hong Kong University of Science and Technology. MC: Daoxin Yao
15:55 – 16:10	Quantum transport in nano-devices Bin Wang, Shenzhen University. MC: Daoxin Yao
16:10 – 16:30	Tea/coffee break, poster, discussion
16:30 – 16:55	Keynote presentation
	Intrinsic magnetoresistivity in three-dimensional Dirac materials Shunqing Shen, The University of Hong Kong. MC: Wei Ji
16:55 – 17:55	Invited presentations
16:55 – 17:10	Randomness induced spin-liquid-like phase in the spin-1/2 J_1-J_2 triangular Heisenberg model Hanqing Wu, Sun Yat-sen University. MC: Wei Ji
17:10 – 17:25	Generalized Thouless Pump: theory and experimental realization Longwen Zhou, National University of Singapore. MC: Wei Ji
17:25 – 17:40	Casimir forces between silicon micromechanical components Hobun Chan, Hong Kong University of Science and Technology. MC: Wei Ji

17:40 – 17:55	Microscopic piezoelectric theory and electromechanical coupling correlations in 2D piezoelectric crystals Yunhua Wang, Sun Yat-sen University. MC: Wei Ji
17:55 – 18:15	Contributed presentations
17:55 – 18:05	Amines induced Lead based complex from MAPbI₃ Perovskite single crystal Xiyuan Feng, University of Macau. MC: Wei Ji
18:05 – 18:15	Field angle resolved magneto-resistance of the Ising superconductor NbSe₂ Jian Lyu, Hong Kong University of Science and Technology. MC: Wei Ji
After 18:20	Banquet Dinner (Hotel: Galaxy Macau, Bus pick-up point & time: E4 G/F Lobby @ 18:20 pm)

Saturday, July 28, 2018

09:00 – 12:00	Concurrent session 4: Condensed Matter Physics
Venue:	Anthony Lau Building (E4), E4-1052
Chairpersons:	1. Weiqiang Chen 2. Guo Hong
09:00 – 09:25	Keynote presentation
	Chiral SDW and d + id superconductivity in the magic-angle twisted bilayer-graphene Weiqiang Chen, Southern University of Science and Technology. MC: Guo Hong
09:25 – 10:25	Invited presentations
09:25 – 09:40	Strain and codoping strategies in transition metal and rare earth metal doped Bi₂Se₃ Junyi Zhu, The Chinese University of Hong Kong. MC: Guo Hong
09:40 – 09:55	Raman evidence for dimerization and Mott collapse in α-RuCl₂ Mingyuan Huang, Southern University of Science and Technology. MC: Guo Hong
09:55 – 10:10	Multipole interactions in the molecular polarizabilities of water from ambient to high pressures Ding Pan, Hong Kong University of Science and Technology. MC: Guo Hong
10:10 – 10:25	Long range magnetic order stabilized by acceptors Xiaodong Zhang, The Chinese University of Hong Kong. MC: Guo Hong
10:25 – 10:35	Contributed presentations
	Aqueous carbon dioxide at extreme conditions by ab initio molecular dynamics Nore Stolte, Hong Kong University of Science and Technology. MC: Guo Hong
10:35 – 10:55	Tea/coffee break, poster, discussion
10:55 – 11:40	Invited presentations
10:55 – 11:10	Multifunctional, 0D & 1D Graphene aerogel-phase change material composites Guo Hong, University of Macau. MC: Weiqiang Chen
11:10 – 11:25	Exciton and valley dynamics in monolayer tungsten diselenide Tengfei Yan, The University of Hong Kong. MC: Weiqiang Chen
11:25 – 11:40	Optical selection rules for excitonic Rydberg series in the massive Dirac cones of hexagonal two-dimensional materials Pu Gong, The University of Hong Kong. MC: Weiqiang Chen
11:40 – 12:00	Contributed presentations
11:40 – 11:50	Enhancement of superconductivity on approaching the structural quantum critical point Yiu Wing Cheung, The Chinese University of Hong Kong. MC: Weiqiang Chen
11:50 – 12:00	Anisotropic two-gap superconductivity and the absence of a Pauli paramagnetic limit in single-crystalline LaO_{0.5}Fo.5BiS₂ Yuet Ching Chan, The Chinese University of Hong Kong. MC: Weiqiang Chen
12:05 – 14:00	Buffet Lunch (venue: UM Chao Kuang Piu College, W21-G019)