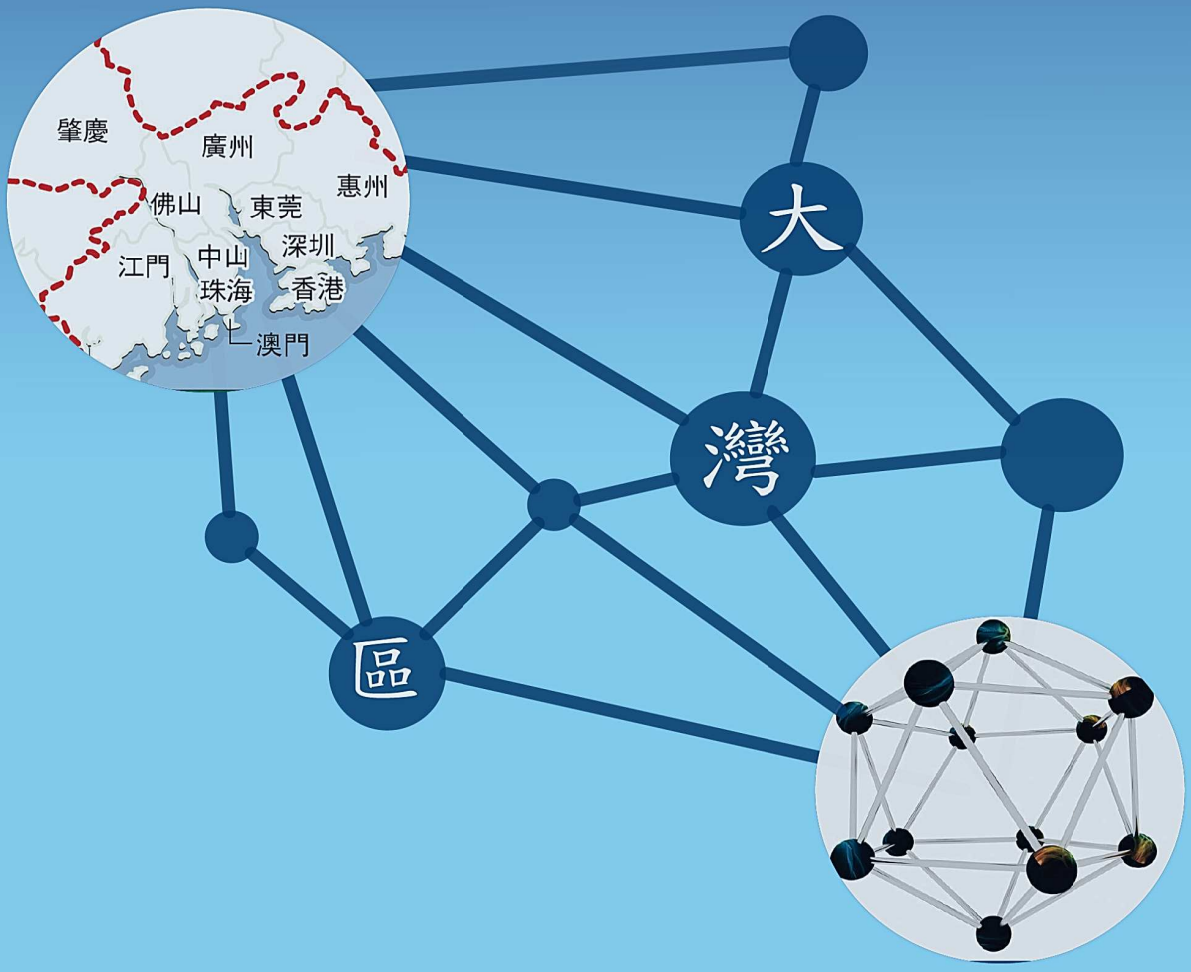
2018 Joint Annual Conference of Physical Societies in Guangdong—Hong Kong—Macao Greater Bay Area

粵港澳大灣區物理學會2018聯合年會

26-29/07/2018

University of Macau 澳門大學



Organizers:
主辦單位

PSM
The Physical Society of Macau

Physical Society of Hong Kong
香港物理學會

Guangdong Physics Society

澳門大學
UNIVERSIDADE DE MACAU
UNIVERSITY OF MACAU

26 July (Thursday) Conference program tentative_18 July

Time	Activity	Venue
14:30-17:30	Registration	E4 G/F Lobby
18:00-20:00	Dinner hosted by Director of Institute of Applied Physics and Materials Engineering	N1-G008

27 July (Friday)

Time	Activity	Venue
09:00-09:15	Opening Remarks 1. *Prof. Yonghua SONG, Rector, University of Macau* 2. *Prof. Xiang ZHANG, The University of Hong Kong* 3. *Prof. Xin-Cheng XIE, National Natural Science Foundation of China*	E4-G078
Plenary Presentation *(chaired by Prof. Zikang Tang, University of Macau)*		
09:15-09:45	**TBC** By *Prof. Xiang ZHANG, The University of Hong Kong*	E4-G078
09:45-10:15	**When Big Data Meets Physics** By *Prof. Lionel M. S. NI, University of Macau*	
10:15-10:20	Group photo	
10:20-10:40	Coffee Break	E4 G/F Lobby
10:40-11:10	**Water: Soft in Nature Hard in Science** By *Prof. Enge WANG, Peking University & Chinese Academy of Sciences*	E4-G078
11:10-11:40	**Introduction of Nuclear Research Centre in Huizhou** By *Prof. Wenlong ZHAN, Chinese Academy of Sciences*	
11:40-12:00	**Towards p-Type Doping for ZnO Light-Emitting Devices** By *Prof. Zikang TANG, University of Macau*	
Advanced Technology for Scientific Research		
12:00-12:12	**Applications of Inert Atmosphere Technologies and Equipment** By *Delong ZHANG, Vigor Gas Purification Technologies (Suzhou) Co.,Ltd*	E4-G078
Lunch		
12:15-13:55	Buffet lunch	W21-G019
13:00-14:00	Internal meeting of Physical Society of Hong Kong (by invitation)	E4-G051
Concurrent Sessions (Please refer details to subsequent pages)		
14:00-18:00	Session 1: Astrophysics and Astronomy (page 3)	E4-3052
	Session 2: Atomic, Molecular and Optical Physics (page 5)	E4-1051
	Session 3: Biophysics and Soft Matter (page 7)	E4-3054
	Session 4: Condensed Matter Physics (page 9)	E4-1052
	Session 5: Interdisciplinary Physics (page 11)	E4-3053
	Session 6-1: Materials Physics and Engineering (page 12)	E4-3062
	Session 6-2: Materials Physics and Engineering (page 14)	E4-3055
	Session 7: Scattering, Particle, Nuclear and Plasma Physics (page 16)	E4-3056
	Session 8: Quantum & Statistical Physics (page 17)	E4-3063
Banquet Dinner		
18:30-20:30	Bus pick-up point and departure time: **E4 G/F Lobby from 18:00-18:20**	Oasis, Galaxy Macau

28 July (Saturday)

Time	Activity	Venue
Concurrent Sessions		
09:00-12:05	Session 1: Astrophysics and Astronomy (page 4)	E4-3052
	Session 2: Atomic, Molecular and Optical Physics (page 6)	E4-1051
	Session 3: Biophysics and Soft Matter (page 8)	E4-3054
	Session 4: Condensed Matter Physics (page 10)	E4-1052
	Session 6-1: Materials Physics and Engineering (page 13)	E4-3062
	Session 6-2: Materials Physics and Engineering (page 15)	E4-3055
	Session 8: Quantum & Statistical Physics (page 18)	E4-3063
Lunch		
12:05-13:55	Buffet lunch	W21-G019
13:00-14:00	Internal meeting of Physical Society of Guangdong (by invitation)	E4-1061
13:00-14:00	Internal meeting of The Physical Society of Macao (by invitation)	E4-G051
Plenary Presentation *(chaired by Prof. Zidan WANG, The University of Hong Kong and Prof. Biao WANG, Sun Yat-Sen University)*		
14:00-14:30	**Discrete scale invariance in topological semimetals** By *Prof. Xin-Cheng XIE, Peking University*	E4-G078
14:30-15:00	**Quantum transport in Dirac semimetal-superconductor hybrid devices** By *Prof. Dapeng YU, Southern University of Science and Technology*	
15:00-15:30	**Study on Improvement Technology for Durability of Concrete Under the condition of severe environment** By *Prof. Changwen MIAO, Southeast University*	
15:30-16:00	**Binary evolution and its applications** By *Prof. Zhanwen HAN, Chinese Academy of Sciences*	
16:00-16:30	Coffee Break / Poster Exhibition	E4 G/F Lobby
17:00-17:30	**夸克胶子新物质形态的硬探针信号及相关物理进展** By *Prof. Enke WANG, South China Normal University*	E4-G078
17:30-18:00	**China Spallation Neutron Source: a rising star on the horizon for neutron scattering in China** By *Prof. Fangwei WANG, Chinese Academy of Sciences*	
18:00-18:10	Closing Speech *Prof. Biao WANG, Sun Yat-Sen University* Best Poster Award Presentation	

29 July (Sunday)

Time	Activity	Venue
08:30-12:30	Half-day city tour	N/A

Concurrent session 1: Astrophysics and Astronomy

27 July (Friday)

14:00 – 18:15	Concurrent session 1: Astrophysics and Astronomy
Venue:	Anthony Lau Building (E4), E4-3052
Chairpersons:	1. Kwing Lam Chan 2. Tao Cai 3. Long Long Feng
14:00 – 14:50	Keynote presentation
14:00 – 14:25	**Turbulence on Cosmic Scales** Long Long Feng, Sun Yat-Sen University. MC: Kwing Lam Chan
14:25 – 14:50	**Multimessenger observations of a flaring blazar coincident with a high-energy neutrino** Pablo M. Saz Parkinson, The University of Hong Kong. MC: Kwing Lam Chan
14:50 – 16:05	Invited presentations
14:50 – 15:05	**Numerical Modeling of the Carbon Dioxide Cycle in the Martian Atmosphere** Kim Chiu Chow, Macau University of Science and Technology. MC: Tao Cai
15:05 – 15:20	**The Tai Chi in Star Formation** Hua-bai Li, Chinese University of Hong Kong. MC: Tao Cai
15:20 – 15:35	**Characterizing the Radiative and Timing Anomaly of Magnetars** Chin-Ping Hu, The University of Hong Kong. MC: Tao Cai
15:35 – 15:50	**Convective Dynamics of Gaseous Planets** Kwing Lam Chan, Macau University of Science and Technology. MC: Tao Cai
15:50 – 16:05	**Variable Mass Accretion Rates in Star Formation** Yang Gao, Sun Yat-Sen University. MC: Tao Cai
16:05 – 16:25	Tea/coffee break, poster, discussion @E4 G/F Lobby
16:25 – 16:50	Keynote presentation
	Magnetars: the Strongest Magnets in the Universe Stephen C.-Y. Ng, The University of Hong Kong. MC: Long Long Feng
16:50 – 18:05	Invited presentations
16:50 – 17:05	**Energy Dissipation Processes in Solar Wind Turbulence** Yi Wang, Harbin Institute of Technology, Shenzhen. MC: Long Long Feng
17:05 – 17:20	**What Can We Learn about Red Giants from Asteroseismology** Tao Wu, Yunnan Observatories, CAS. MC: Long Long Feng
17:20 – 17:35	**Gamma-ray Burst Jet Breaks Revisited and GRB Observing Plan** Xiang-Gao Wang, Guangxi University. MC: Long Long Feng
17:35 – 17:50	**Numerical Simulations of Efficient Turbulent Convection** Tao Cai, Macau University of Science and Technology. MC: Long Long Feng
17:50 – 18:05	**Prodigious and Continuous Formation of Super Star Clusters from Cooled Intracluster Gas** Jeremy Lim, The University of Hong Kong. MC: Long Long Feng
18:05 – 18:15	Contributed presentations
	Searching for Soft Pulsars with the Fermi Large Area Telescope Brent Limyansky, University of California. MC: Long Long Feng
18:20	Banquet Dinner @Oasis, Galaxy Macau (Bus pick-up point & time: E4 G/F Lobby @ 18:20)

28 July (Saturday)

09:00 – 12:10	Concurrent session 1: Astrophysics and Astronomy
Venue:	Anthony Lau Building (E4), E4-3052
Chairpersons:	1. Cong Yu 2. Man Hoi Lee
09:00 – 09:25	Keynote presentation
	Dynamics of Circumstellar Planets in Binary System Man Hoi Lee, University of Hong Kong. MC: Cong Yu
09:25 – 10:25	Invited presentations
09:25 – 09:40	**The Structure and Dynamical Roles of Circumplanetary Discs** Hsiang-Hsu Wang, Chinese University of Hong Kong. MC: Cong Yu
09:40 – 09:55	**Characteristics Time of Stellar Flares on Solar-like Stars** Yan Yan, National Astronomical Observatory, CAS. MC: Cong Yu
09:55 – 10:10	**Multi-fluid MHD Simulation of the Magnetic Flux Rope in the Ionosphere of Venus and Mars** Liang Hai Xie, Macau University of Science and Technology. MC: Cong Yu
10:10 – 10:25	**The Dependence of Flux Transfer Events on Interplanetary Magnetic Field Clock Angles** Tian Ran Sun, National Space Science Center, CAS. MC: Cong Yu
10:25 – 10:45	Tea/coffee break, poster, discussion @E4 G/F Lobby
10:45 – 11:10	Keynote presentation
	The Formation of Super-Earths by Tidally Forced Turbulence Cong Yu, Sun Yat-Sen University. MC: Man Hoi Lee
11:10 – 12:10	Invited presentations
11:10 – 11:25	**HKU's Laboratory for Space Research - an interdisciplinary nexus for the future** Quentin Parker, The University of Hong Kong. MC: Man Hoi Lee
11:25 – 11:40	**Dynamic Processes of Martian Dust Storms in the Northern Mid-latitude Region during the Storm Season** Jing Xiao, Macau University of Science and Technology. MC: Man Hoi Lee
11:40 – 11:55	**Shock Acceleration with Focused Transport Model** Ping Bing Zuo, Harbin Institute of Technology, Shenzhen. MC: Man Hoi Lee
11:55 – 12:10	**Circumstellar Disks in Close Binaries: Prograde v.s. Retrograde** Xiaojia Zhang, The University of Hong Kong. MC: Man Hoi Lee
12:15- 14:00	Buffet Lunch @W21-G019

Concurrent session 2: Atomic, Molecular and Optical Physics

27 July (Friday)

14:00 – 18:00	Concurrent session 2: Atomic, Molecular and Optical Physics
Venue:	Anthony Lau Building (E4), E4-1051
Chairpersons:	1. Hin-Lap Yip 2. Youtian Tao 3. Guichuan Xing
14:00 – 14:25	Keynote presentation
	Microfluidics for artificial photosynthesis of carbohydrates Xuming Zhang, The Hong Kong Polytechnic University. MC: Hin-Lap Yip
14:25 – 15:55	Invited presentations
14:25 – 14:40	**Fermi Liquid Properties for Weakly Repulsive p-wave Fermi Gases** Shanshan Ding, The University of Hong Kong. MC: Guichuan Xing
14:40 – 14:55	**High-performance SERS substrates: fabrication and applications** Yanjun Liu, Southern University of Science and Technology. MC: Guichuan Xing
14:55 – 15:10	**Heavy Metal Containing Terpolymers for Polymer Solar Cells** Youtian Tao, Nanjing Tech University. MC: Guichuan Xing
15:10 – 15:25	**Test Lorentz invariance with trapped Yb^+ ions** Wu Bian, Sun Yat-Sen University. MC: Guichuan Xing
15:25 – 15:40	**Production of Ultracold Molecule with Zeeman Deceleration and Laser Catalyzed Reaction** Yang Liu, Sun Yat-Sen University. MC: Guichuan Xing
15:40 – 15:55	**Structural Phase Transition and Optical Property Investigation of Perovskite Crystal** Rui Chen, Southern University of Science and Technology. MC: Guichuan Xing
15:55 – 16:05	Contributed presentations
	Dipolar collisions between ultracold NaRb molecules Junyu He, The Chinese University of Hong Kong. MC: Guichuan Xing
16:05 – 16:25	Tea/coffee break, poster, discussion @E4 G/F Lobby
16:25 – 16:50	Keynote presentation
	Lead halide perovskite based optoelectronic devices and their applications Qinghai Song, Harbin Institute of Technology Shenzhen Graduate School. MC: Youtian Tao
16:50 – 17:50	Invited presentations
16:50 – 17:05	**All-dielectric valley photonic crystals: Paving the way to topological nanophotonics** Jian-Wen Dong, Sun Yat-Sen University. MC: Youtian Tao
17:05 – 17:20	**Structural Engineering of Graphene for Flexible and Ultrasensitive Mechanical Sensors** Xuchun Gui, Sun Yat-Sen University. MC: Youtian Tao
17:20 – 17:35	**Bright and Efficient Light-Emitting Diodes Based on Perovskite Quantum Dots** Kai Wang, Southern University of Science and Technology. MC: Youtian Tao
17:35 – 17:50	**Ultrafast Carrier Dynamics in few-Layer MoS_2** Zhaogang Nie, Guangdong University of Technology. MC: Youtian Tao
17:50 – 18:00	Contributed presentations
	Persistent spin helix and its instability in spin-orbit coupled normal Bose gas Wai Ho Tang, The University of Hong Kong. MC: Youtian Tao
18:05	Banquet Dinner @Oasis, Galaxy Macau (Bus pick-up point & time: E4 G/F Lobby @ 18:05)

28 July (Saturday)

09:00 – 12:00	Concurrent session 2: Atomic, Molecular and Optical Physics
Venue:	Anthony Lau Building (E4), E4-1051
Chairpersons:	1. Kai Wang 2. Yanjun Liu
09:00 – 09:25	Keynote presentation
	Exciton-Phonon Interaction in 2D Materials Jun Zhang, Institute of Semiconductors, CAS. MC: Kai Wang
09:25 – 10:10	Invited presentations
09:25 – 09:40	**Highly Stable Low-Threshold Lasing in Ruddlesden-Popper Perovskite Microplatelets** Mingjie Li, Nanyang Technological University. MC: Kai Wang
09:40 – 09:55	**Strong light-matter interaction in perovskite microcavities** Qing Zhang, Peiking University. MC: Kai Wang
09:55 – 10:10	**Observation of parity-time symmetry breaking transitions in a dissipative system of ultracold atoms** Le Luo, Sun Yat-Sen University. MC: Kai Wang
10:10 – 10:20	Contributed presentations
	Dielectrophoresis-actuated tunable optofluidic lenses for in-plane light manipulation Qingming Chen, The Hong Kong Polytechnic University. MC: Kai Wang
10:20 – 10:40	Tea/coffee break, poster, discussion @E4 G/F Lobby
10:40 – 11:05	Keynote presentation
	Acoustic spin-redirection geometric phase Shubo Wang, City University of Hong Kong. MC: Yanjun Liu
11:05 – 11:50	Invited presentations
11:05 – 11:20	**Optical Design for Advanced Tandem and Semitransparent Polymer Solar Cells** Hin-Lap Yip, South China University of Technology. MC: Yanjun Liu
11:20 – 11:35	**3R MoS_2 with Broken Inversion Symmetry: A Promising Ultrathin Nonlinear Optical Device** Xinfeng Liu, National Center for Nanoscience and Technology. MC: Yanjun Liu
11:35 – 11:50	**Three-body recombination near a narrow Feshbach resonance in 6Li** Jiaming Li, Sun Yat-Sen University. MC: Yanjun Liu
11:50 – 12:00	Contributed presentations
	Exitonic Excitation of a Superfluid Fermi Gas in a Double-layer Optical Lattice Johnson Chan, The University of Hong Kong. MC: Yanjun Liu
12:05 – 14:00	Buffet Lunch @W21-G019

Concurrent session 3: Biophysics and Soft Matter

27 July (Friday)

14:00 – 18:10	Concurrent session 3: Biophysics and Soft Matter
Venue:	Anthony Lau Building (E4), E4-3054
Chairpersons:	1. Dan Li 2. Xuanjun Zhang 3. De-Fang Ouyang
14:00 – 14:25	Keynote presentation
	Chemopallet - A Strategy for Tuning Photoluminescence of Supramolecular Coordination Entities Dan Li, Jinan University. MC: Xuanjun Zhang
14:25 – 15:40	Invited presentations
14:25 – 14:40	**Multifunctional fluorescent optical sensors for bioanalysis** Yanqing Tian, Southern University of Science and Technology, China. MC: Xuanjun Zhang
14:40 – 14:55	**Semiconducting Polymers for Biomedical Applications** Changfeng Wu, Southern University of Science and Technology, China. MC: Xuanjun Zhang
14:55 – 15:10	**Mechanism of contact between a droplet and a smooth substrate** Lei Xu, The Chinese University of Hong Kong. MC: Xuanjun Zhang
15:10 – 15:25	**Systems approach to complex human microbial networks** Pan-Jun Kim, Hong Kong Baptist University. MC: Xuanjun Zhang
15:25 – 15:40	**Human brain conectomics and microbiomics in schizophrenia** Kai Wu, South China University of Technology. MC: Xuanjun Zhang
15:40 – 16:00	Contributed presentations
15:40 – 15:50	**Modified interfacial force field for accurate representation of peptide adsorption free energy on self-assembled monolayer** Pratiti Bhadra, University of Macau. MC: Xuanjun Zhang
15:50 – 16:00	**Analysis of potential landscape of colloidal diffusion using the Markov state model** Chengjie Luo, Hong Kong University of Science and Technology. MC: Xuanjun Zhang
16:00 – 16:20	Tea/coffee break, poster, discussion @E4 G/F Lobby
16:20 – 16:45	Keynote presentation
	The control of megakaryocyte and platelet formation Mo Yang, South Medical University. MC: Dan Li
16:45 – 17:30	Invited presentations
16:45 – 17:00	**Dynamic basis of substrate permissiveness of a plant acyltransferase** Yi Wang, The Chinese University of Hong Kong. MC: Dan Li
17:00 – 17:15	**Photoacoustic imaging guided cancer theranostics** Yuan Zheng, University of Macau. MC: Dan Li
17:15 – 17:30	**A microcannon device for overcoming biological membrane barriers by powering nanoparticles** Gang Chen, Guangdong Pharmaceutical University. MC: Dan Li
17:30 – 18:10	Contributed presentations
17:30 – 17:40	**Phase separation of swimmers drives long-range fluid** Haoran Xu, The Chinese University of Hong Kong. MC: De-Fang Ouyang
17:40 – 17:50	**Modeling Predictive Information and Direction Selectivity in the Retina** Min Yan, Hong Kong University of Science and Technology. MC: De-Fang Ouyang
17:50 – 18:00	**The Link between Membrane Composition and Permeability to Drugs** Chi Hang Tse, The Chinese University of Hong Kong. MC: De-Fang Ouyang
18:00 – 18:10	**Transfer learning for the prediction of pharmacokinetic properties** Ye Zhuyifan, University of Macau. MC: De-Fang Ouyang
18:15	Banquet Dinner @Oasis, Galaxy Macau (Bus pick-up point & time: E4 G/F Lobby @ 18:15)

28 July (Saturday)

09:00 – 12:00	Concurrent session 3: Biophysics and Soft Matter
Venue:	Anthony Lau Building (E4), E4-3054
Chairpersons:	1. De-Fang Ouyang 2. Ophelia K. C. Tsui 3. Zhengtao Xu
09:00 – 09:25	Keynote presentation
	Sulfur Chemistry and Linker Cyclization for Stable and Electroactive Metal-Organic Frameworks Zhengtao Xu, City University of Hong Kong. MC: De-Fang Ouyang
09:25 – 10:25	Invited presentations
09:25 – 09:40	**Growth factor-binding biomaterials scaffolds for tissue repair** Chunming Wang, University of Macau. MC: Ophelia K. C. Tsui
09:40 – 09:55	**Functionality-Oriented DNA Material: Taking Advantage of Amplification Techniques** Leilei Tian, Southern University of Science and Technology, China. MC: Ophelia K. C. Tsui
09:55 – 10:10	**Single- and Two-Photon Non-Diffracting Light-Sheet Microscopy for Bioimaging** Shengwang Du, Hong Kong University of Science and Technology. MC: Ophelia K. C. Tsui
10:10 – 10:25	**Titania-Coated Gold Nanostructures for Blocking Autophagy Flux and Sensitizing Cancer Cells to Proteasome Inhibitor-Induced Death** Xiaoming Zhu, Macau University of Science and Technology. MC: Ophelia K. C. Tsui
10:25 – 10:35	Contributed presentations
	Investigation molecular mechanism of cyclodextrin formulations Zhao Qianqian, University of Macau. MC: Ophelia K. C. Tsui
10:35 – 10:55	Tea/coffee break, poster, discussion @E4 G/F Lobby
10:55 – 11:20	Keynote presentation
	Transport Properties of Thin Polymer Liquid and Solid Films Ophelia K. C. Tsui, Hong Kong University of Science and Technology. MC: Zhengtao Xu
11:20 – 11:50	Invited presentations
11:20 – 11:35	**High-throughput screening for identification of protein capture agents and proteomic profiling for disease biomarker discovery** Liqian Gao, School of Pharmaceutical Science (Shenzhen), Sun Yat-Sen University. MC: Zhengtao Xu
11:35 – 11:50	**Computational pharmaceutics** Defang Ouyang, University of Macau. MC: Zhengtao Xu
11:50 – 12:00	Contributed presentations
	Pinning and depinning dynamics of a moving contact line over a disordered surface Caishan Yan, Hong Kong University of Science and Technology. MC: Zhengtao Xu
12:05 – 14:00	Buffet Lunch @W21-G019

Concurrent session 4: Condensed Matter Physics

27 July (Friday)

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 @E4 G/F Lobby
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 $MAPbI_3$ Perovskite single crystal** Xiyuan Feng, University of Macau. MC: Wei Ji
18:05 – 18:15	**Field angle resolved magneto-resistance of the Ising superconductor $NbSe_2$** Jian Lyu, Hong Kong University of Science and Technology. MC: Wei Ji
18:20	**Banquet Dinner @Oasis, Galaxy Macau(Bus pick-up point & time: E4 G/F Lobby @ 18:20)**

28 July (Saturday)

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 Bi_2Se_3** Junyi Zhu, The Chinese University of Hong Kong. MC: Guo Hong
09:40 – 09:55	**Raman evidence for dimerization and Mott collapse in α-$RuCl_2$** 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 @E4 G/F Lobby
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 $LaO_{0.5}F_{0.5}BiS_2$** Yuet Ching Chan, The Chinese University of Hong Kong. MC: Weiqiang Chen
12:05 – 14:00	**Buffet Lunch @W21-G019**

Concurrent session 5: Interdisciplinary Physics

27 July (Friday)

14:00 – 17:55	Concurrent session 5: Interdisciplinary Physics
Venue:	Anthony Lau Building (E4), E4-3053
Chairpersons:	1. Hui Pan 2. Yuan Cheng
14:00 – 14:25	Keynote presentation
	Mechanical Properties of Silkworm Silk and its Applications Yuan Cheng, Institute of High Performance Computing. MC: Hui Pan
14:25 – 15:40	Invited presentations
14:25 – 14:40	**Multifunctional materials based on cellulose** Haisong Qi, South China University of Technology. MC: Hui Pan
14:40 – 14:55	**Preparation, Structures, Properties of Natural Wood Fibrous Composite Materials: From Micron to Nanoscale** Detao Liu, South China University of Technology. MC: Hui Pan
14:55 – 15:10	**Structural engineering pseudocapacitive performance of spinel cobaltite MCo_2O_4 (M = Mn, Ni, Cu, and Co)** Kwun Nam Hui, University of Macau. MC: Hui Pan
15:10 – 15:25	**Efficiency Boost of Inverted Quantum Dot Light Emitting Diodes by Thermal Damage Suppression Using an HAT-CN Interlayer** Shuangpeng Wang, University of Macau. MC: Hui Pan
15:25 – 15:40	**Solution-Controlled Fabrication of Wrinkled Graphene for Chemical and Mechanical Detection** Wenjun Chen, Sun Yat-Sen University. MC: Hui Pan
15:40 – 15:50	Contributed presentations
	Hong Kong Housing Price Forecasting: a Guassian Process Approach Juntao Wang, Hong Kong University of Science and Technology. MC: Hui Pan
15:50 – 16:20	Tea/coffee break, poster, discussion @E4 G/F Lobby
16:20 – 16:45	Keynote presentation
	Metastable Nano Alloys for Hydrogen Storage Huaiyu Shao, University of Macau. MC: Yuan Cheng
16:45 – 17:45	Invited presentations
16:45 – 17:00	**Design of 2D Nanostructures as Catalysts for Hydrogen Production** Hui Pan, University of Macau. MC: Yuan Cheng
17:00 – 17:15	**Manipulation of Micro-drops on Deformable Superhydrophobic Platform enabled via Magnetic Actuation** Binpu Zhou, University of Macau. MC: Yuan Cheng
17:15 – 17:30	**The relation of sorptivity and capillary coefficient for water transport in mortar** Yunsheng Zhang, Southeast University. MC: Yuan Cheng
17:30 – 17:45	**Current status, challenges and opportunities of teaching physics in Sino-French nuclear engineering institute** Kan Lai, Sun Yat-Sen University. MC: Yuan Cheng
17:45 – 17:55	Contributed presentations
	Measuring the Scale of Congestion from Basic Quantities Tat Shing Choi, Hong Kong University of Science and Technology. MC: Yuan Cheng
18:00	Banquet Dinner @Oasis, Galaxy Macau (Bus pick-up point & time: E4 G/F Lobby @ 18:00)

Concurrent session 6-1: Materials Physics and Engineering

27 July (Friday)

14:00 – 17:50	Concurrent session 6-1: Materials Physics and Engineering
Venue:	**Anthony Lau Building (E4), E4-3062**
Chairpersons:	**1. Changwen Miao 2. Zongjin Li**
14:00 – 14:35	**Keynote presentation**
	Micromechanical Modeling of Strain Hardening Cementitious Composites Christopher K Leung, Hong Kong University of Technology. MC: Changwen Miao
14:35 – 15:35	**Invited presentations**
14:35 – 14:55	**The relation of sorptivity and capillary coefficient for water transport in mortar** Yunsheng Zhang, Southeast University. MC: Changwen Miao
14:55 – 15:15	**Application of embedded piezoelectrc transducers in concrete** Dongyu Xu, University of Jinan. MC: Changwen Miao
15:15 – 15:35	**How to effectively use graphene oxide to reinforce cementitious composites** Zeyu Lu, Hong Kong University of Technology. MC: Changwen Miao
16:00 – 16:30	Tea/coffee break, poster, discussion @E4 G/F Lobby
16:30 – 17:50	**Invited presentations**
16:30 – 16:50	**Development of low drying shrinkage foamed concrete** Kaitai Wan, Brunel University London. MC: Zongjin Li
16:50 – 17:10	**Flaw characterization and correlation with cracking strength in SHCC** Cong Lu, Southeast University. MC: Zongjin Li
17:10 – 17:30	**Development of structural-functional integrated energy storage concrete with innovative macro-encapsulated PCM** Haibin Yang, Shenzhen University. MC: Zongjin Li
17:30 – 17:50	**Engineering properties of Pb contaminated clay with nZVI treatment** Wanhuan Zhou, University of Macau. MC: Zongjin Li
18:00	**Banquet Dinner @Oasis, Galaxy Macau (Bus pick-up point & time: E4 G/F Lobby @ 18:00)**

28 July (Saturday)

09:00 – 12:00	Concurrent session 6-1: Materials Physics and Engineering
Venue:	**Anthony Lau Building (E4), E4-3062**
Chairpersons:	**1. Guoxing Sun 2. Wanhuan Zhou**
09:00 – 09:35	**Keynote presentation**
	TBC Caijun Shi, Hunan University. MC: Guoxing Sun
09:35 – 10:35	**Invited presentations**
09:35 – 09:55	**Biomimetic superhydrophobic surface of concrete: Topographic and chemical modification by a direct spray method** Wei She, Southeast University. MC: Guoxing Sun
09:55 – 10:15	**Influence of concrete micro-dispersant on cement hydration** Yanfeng Zuo, Institute of Building Materials Technology Information. MC: Guoxing Sun
10:15 – 10:35	**Transportation model of calcium silicate hydrate in mesoscale: a molecular dynamic study** Ming Sun, Hong Kong University of Technology. MC: Guoxing Sun
10:35 – 11:00	Tea/coffee break, poster, discussion @E4 G/F Lobby
11:00 – 12:00	**Invited presentations**
11:00 – 11:20	**Effect of fly ash microsphere on the rheology and microstructure of alkali-activated fly ash/slag pastes** Tao Yang, Yancheng Institute of Technology. MC: Wanhuan Zhou
11:20 – 11:40	**Fire resistant eco concrete blocks containing waste glass** Binmeng Chen, Nano and Advanced Materials Institute Ltd. . MC: Wanhuan Zhou
11:40 – 12:00	**Application of nanocomposites in construction materials** Guoxing Sun, University of Macau. MC: Wanhuan Zhou
12:05 - 14:00	**Buffet Lunch @W21-G019**

Concurrent session 6-2: Materials Physics and Engineering

27 July (Friday)

14:00 – 18:05	Concurrent session 6-2: Materials Physics and Engineering
Venue:	**Anthony Lau Building (E4), E4-3055**
Chairpersons:	**1. Jensen Tsan Hang Li 2. Yinguo Xiao**
14:00 – 14:30	**Keynote presentation**
	Structural and magnetic properties of cathode materials studied by neutron scattering Yinguo Xiao, Peking University Shenzhen Graduate School. MC: Jensen Tsan Hang Li
14:30 – 15:10	**Invited presentations**
14:30 – 14:50	**Characterizing collective structure distortions in functional materials using atomic-scale scanning transmission electron microscopy** Ye Zhu, The Hong Kong Polytechnic University. MC: Jensen Tsan Hang Li
14:50 – 15:10	**Advanced nanotechnology for photovoltaic devices** Feng Yan, The Hong Kong Polytechnic University. MC: Jensen Tsan Hang Li
15:10 – 15:55	**Contributed presentations**
15:10 – 15:25	**Stability of wurtzite semi-polar surfaces: algorithms and practices** Jingzhao Zhang, The Chinese University of Hong Kong. MC: Jensen Tsan Hang Li
15:25 – 15:40	**Improved optoelectronic properties and thermal stability of non-stoichiometric p-type $NiO_{1+\delta}$ by copper doping** Kingsley Egbo, City University of Hong Kong. MC: Jensen Tsan Hang Li
15:40 – 15:55	**Electrochemical catalytic reactions of topological-insulator thin films** Qing Qu, Hong Kong University of Science and Technology. MC: Jensen Tsan Hang Li
16:00 – 16:30	Tea/coffee break, poster, discussion @E4 G/F Lobby
16:30 – 17:50	**Invited presentations**
16:30 – 16:50	**Non-Hermitian elastic metamaterials** Jensen Tsan Hang Li, Hong Kong University of Science and Technology. MC: Yinguo Xiao
16:50 – 17:10	**Nanocrystalline $CoCrFeNiAl_{0.3}$ high-entropy alloy thin film coating by magnetron sputtering** Weibing Liao, Shenzhen University. MC: Yinguo Xiao
17:10 – 17:30	**半导体和绝缘体的激光辅助场蒸发** Yu Xia, Sun Yat-Sen University. MC: Yinguo Xiao
17:30 – 17:50	**Realistic Floquet semimetal with exotic topological linkages between arbitrarily many nodal loops** Linhu Li, National University of Singapore. MC: Yinguo Xiao
17:50 – 18:05	**Contributed presentations**
	Lattice-matched metastable Zinc-blende $MnSe_{1-x}Te_x$ on ZnTe as a promising THz emitter material Man Kit Cheng, Hong Kong University of Science and Technology. MC: Yinguo Xiao
18:10	**Banquet Dinner @Oasis, Galaxy Macau (Bus pick-up point & time: E4 G/F Lobby @ 18:10)**

28 July (Saturday)

09:00 – 11:50	Concurrent session 6-2: Materials Physics and Engineering
Venue:	Anthony Lau Building (E4), E4-3055
Chairpersons:	1. Lingmin Yao 2. Francis Chi-Chung Ling
09:00 – 09:25	Keynote presentation
	Reversible tuning of ferromagnetism, near band edge emission and resistive switching in Cu-doped ZnO film grown Francis Chi-Chung Ling, The University of Hong Kong. MC: Lingmin Yao
09:25 – 10:25	Invited presentations
09:25 – 09:40	**Thermal transport manipulated by nanoscale interfacial engineering** Huashan Li, Sun Yat-Sen University. MC: Lingmin Yao
09:40 – 09:55	**Preparation and luminescent properties of $Li_{2.06}Nb_{0.18}Ti_{0.76}O_3$: Eu^{3+} phosphors** Qun Zeng, South China Normal University. MC: Lingmin Yao
09:55 – 10:10	**Fiber-based energy harvesting and storage devices for smart garments** Wenjie Mai, Jinan University. MC: Lingmin Yao
10:10 – 10:25	**Novel Design of Highly Oriented Titanate-based Nanorod Array and Its Application in Nanocomposite Capacitors** Lingmin Yao, Guangzhou University. MC: Lingmin Yao
10:25 – 10:35	Contributed presentations
	Constructing a multichannel low-cost laser scanning microscope for luminescence and transmission/reflection imaging Albert Wai Kit Lau, Hong Kong University of Science and Technology. MC: Lingmin Yao
10:35 – 11:00	Tea/coffee break, poster, discussion @E4 G/F Lobby
11:00 – 11:20	Keynote presentation
	Neutron Spin excitations in superconducting $Ba(Fe_{0.926}Co_{0.074})_2As_2$ Haifeng Li, University of Macau. MC: Francis Chi-Chung Ling
11:20 – 11:50	Invited presentations
11:20 – 11:35	**Fabrication of transparent $Tb_3Al_5O_{12}$ ceramics by hot isostatic pressing sintering** Yinzhen Wang, South China Normal University. MC: Francis Chi-Chung Ling
11:35 – 11:50	**Approaching the capacity limit of lithium cobalt oxide in lithium ion batteries via lanthanum and aluminum doping** Qi Liu, City University of Hong Kong. MC: Francis Chi-Chung Ling
11:55 – 14:00	Buffet Lunch @W21-G019

Concurrent session 7: Scattering, Particle, Nuclear & Plasma Physics

27 July (Friday)

14:00 – 18:00	Concurrent session 7: Scattering, Particle, Nuclear & Plasma Physics
Venue:	Anthony Lau Building (E4), E4-3056
Chairpersons:	1. Hui Liu 2. Jenny Hiu Ching Lee 3. Wei Wang
14:00 – 14:50	Keynote presentation
14:00 – 14:25	**Nuclear Structure and Correlations: From Stable to Unstable Nuclei** Jenny Hiu Ching Lee, The University of Hong Kong. MC: Hui Liu
14:25 – 14:50	**Higher order corrections to the Chiral Magnetic Effect** Hui Liu, Jinan University. MC: Jenny Hiu Ching Lee
14:50 – 15:35	Invited presentations
14:50 – 15:05	**Physics study with accelerator neutrino oscillation and scattering** Jian Tang, Sun Yat-Sen University. MC: Jenny Hiu Ching Lee
15:05 – 15:20	**Hadronic weak decay of the lightest charmed baryon** Fanrong Xu, Jinan University. MC: Jenny Hiu Ching Lee
15:20 – 15:35	**Beta-decay studies of extremely proton-rich nuclei from Mg to S** Xinxing Xu, The University of Hong Kong. MC: Jenny Hiu Ching Lee
15:35 – 16:05	Contributed presentations
15:35 – 15:45	**Shape coexistence in neutron-rich ^{69,71,73}Co nuclei** Taras Lokotko, The University of Hong Kong. MC: Hui Liu
15:45 – 15:55	**Cluster structure of neutron-rich Beryllium isotopes** Pengjie Li, The University of Hong Kong. MC: Hui Liu
15:55 – 16:05	**Beta decay of ^{26}P** Pengfei Liang, The University of Hong Kong. MC: Hui Liu
16:05 – 16:30	Tea/coffee break, poster, discussion @E4 G/F Lobby
16:30 – 16:55	Keynote presentation
	The High-Energy Physics Experiments in the Greater Bay Area Wei Wang, Sun Yat-Sen University. MC: Hui Liu
16:55 – 17:40	Invited presentations
16:55 – 17:10	**Cosmic Inflation as a Particle Collider** Yi Wang, Hong Kong University of Science and Technology. MC: Wei Wang
17:10 – 17:25	**Overview of Reactor Neutrino Experiment** Steven (Chan-Fai) Wong, Sun Yat-Sen University. MC: Wei Wang
17:25 – 17:40	**Anomaly-free chiral fermions, neutrino masses, and Dark Matter** Chi-Fong Wong, Macau University of Science and Technology. MC: Wei Wang
17:40 – 18:00	Contributed presentations
17:40 – 17:50	**β-delayed neutron emission of extremely neutron-rich nuclei relevant to A=130 r-process abundance peak** Jiajian Liu, The University of Hong Kong. MC: Wei Wang
17:50 – 18:00	**Leptoquark induced flavor changing decays of Z boson and top quark** Mingxian Wang, Jinan University. MC: Wei Wang
18:05	Banquet Dinner @Oasis, Galaxy Macau (Bus pick-up point & time: E4 G/F Lobby @ 18:05)

Concurrent session 8: Quantum & Statistical Physics

27 July (Friday)

14:00 – 18:05	Concurrent session 8: Quantum & Statistical Physics
Venue:	**Anthony Lau Building (E4), E4-3063**
Chairpersons:	**1. Guanghui Hu 2. Huashan Li**
14:00 – 14:25	**Keynote presentation**
	Complexity Science in a Quantum World Mile Gu, Nanyang Technological University. MC: Guanghui Hu
14:25 – 15:40	**Invited presentations**
14:25 – 14:40	**Ultimate precision limit for quantum metrology** Haidong Yuan, The Chinese University of Hong Kong. MC: Guanghui Hu
14:40 – 14:55	**One-Shot Detection Limits of Quantum Illumination with Discrete Signals** Man-Hong Yung, Southern University of Science and Technology. MC: Guanghui Hu
14:55 – 15:10	**Simplified Gentlest Ascent Dynamics for Transition State with Application to Allen-Cahn in Presence of Shear** Xiang Zhou, City University of Hong Kong. MC: Guanghui Hu
15:10 – 15:25	**Density Functional Theory: Two Cases Study** Jingrun Chen, Soochow University. MC: Guanghui Hu
15:25 – 15:40	**An efficient steady-state solver for Boltzmann equation with applications to microflow simulation** Zhicheng Hu, Nanjing University of Aeronautics and Astronautics. MC: Guanghui Hu
15:40 – 16:00	**Contributed presentations**
15:40 – 15:50	**Optimal operation for the triple-quantum-dot spin qubits** Chengxian Zhang, City University of Hong Kong. MC: Guanghui Hu
15:50 – 16:00	**A tunable charge qubit based on barrier-controlled triple quantum dots** Guo Xuan Chan, City University of Hong Kong. MC: Guanghui Hu
16:00 – 16:30	Tea/coffee break, poster, discussion @E4 G/F Lobby
16:30 – 16:55	**Keynote presentation**
	Gibbs partitions, Mittag Leffler functions and waiting time models Lancelot F. JAMES, Hong Kong University of Sciences and Technology. MC: Huashan Li
16:55 – 17:55	**Invited presentations**
16:55 – 17:10	**On efficient numerical simulations of time-dependent density functional theory** Guanghui Hu, University of Macau. MC: Huashan Li
17:10 – 17:25	**Averaging principle for one dimensional stochastic Burgers equations** Xiaobin Sun, Jiangsu Normal University. MC: Huashan Li
17:25 – 17:40	**Asymptotics for stochastic reaction-diffusion equation driven by subordinate Brownian motion** Ran Wang, Wuhan University. MC: Huashan Li
17:40 – 17:55	**Topological states and cotranslational symmetry in strongly interacting multi-particle systems** Chaohong Li, Sun Yat-Sen University. MC: Huashan Li
17:55 – 18:05	**Contributed presentations**
	Automatic spin-chain learning to explore quantum speed limit Xiaoming Zhang, City University of Hong Kong. MC: Huashan Li
18:10	**Banquet Dinner @Oasis, Galaxy Macau (Bus pick-up point & time: E4 G/F Lobby @ 18:10)**

28 July (Saturday)

09:00 – 12:05	Concurrent session 8: Quantum & Statistical Physics
Venue:	Anthony Lau Building (E4), E4-3063
Chairpersons:	1. Lihu Xu 2. Chunxiong Zheng
09:00 – 09:50	Keynote presentation
09:00 – 09:25	**Extended WKB analysis for the generalized Schrodinger equations in the semi-classical regime** Chunxiong Zheng, Tsinghua University. MC: Lihu Xu
09:25 – 09:50	**Quantum Monte Carlo study of Disordered Spin Systems** Daoxin Yao, Sun Yat-Sen University. MC: Lihu Xu
09:50 – 10:20	Invited presentations
09:50 – 10:05	**Approximation of heavy tailed distributions** Lihu Xu, University of Macau. MC: Chunxiong Zheng
10:05 – 10:20	**Integrated quantum interface of ion trap and parabolic mirror** Zhao Wang, Sun Yat-Sen University. MC: Chunxiong Zheng
10:20 – 10:30	Contributed presentations
	Enhancing Synchronization Stability in Kuramoto Model in Complex Networks against Fluctuations by Optimal Resource Adjustment Kin Yau Tsang, Hong Kong University of Science and Technology. MC: Chunxiong Zheng
10:30 – 10:50	Tea/coffee break, poster, discussion @E4 G/F Lobby
10:50 – 11:15	Keynote presentation
	Multi-photon processes on superconducting qubit circuits Hou Ian, University of Macau. MC: Lihu Xu
11:15 – 11:45	Invited presentations
11:15 – 11:30	**Entanglement detection by the uncertainty relation** Yuan-Yuan Zhao, Sun Yat-Sen University. MC: Lihu Xu
11:30 – 11:45	**Random Active Path Model of Deep Neural Networks with Diluted Binary Synapses** Haiping Huang, Sun Yat-Sen University. MC: Lihu Xu
11:45 – 12:05	Contributed presentations
11:45 – 11:55	**An efficient and adaptive finite element method for Kohn—Sham equation** Yang Kuang, University of Macau. MC: Lihu Xu
11:55 – 12:05	**An asymptotic-based adaptive finite element method for Kohn-Sham equation** Yedan Shen, University of Macau. MC: Lihu Xu
12:10 – 14:00	Buffet Lunch @W21-G019

Poster program

Posters will be on display for the duration of the conference. Authors will be at their poster-board during tea/coffee breaks to discuss their research with interested delegates.

Poster board #	Poster title and author
P1	**Overview of Reactor Neutrino Experiment** Steven (Chan-Fai) Wong, School of Physics, Sun Yat-Sen University.
P2	**Leptoquark induced flavor changing decays of Z boson and top quark** Sam Ming-Yin Wong* and Fanrong Xu, Jinan University.
P3	**An apparatus for studying Feshbach resonance in ultracold 6Li degenerate Fermi gas** Xiao Zhang, School of Physics and Astronomy, Sun Yat-Sen University.
P4	**A New Magnetic Field system for Studying Narrow Feshbach of ultracold 6Li Fermi Gases** Jianxiong Fang, School of Physics and Astronomy, Sun Yat-Sen University.
P5	**Optical path design for trapping $^{171}Yb^{+}$ ions experiment** Tishuo Wang, School of Physics and Astronomy, Sun Yat-Sen University.
P6	**Frequency stabilization of 369 nm and 935 nm for trapping $^{171}Yb^{+}$ ions** Jiangyong Hu, School of Physics and Astronomy, Sun Yat-Sen University.
P7	**Ion traps in harmonic and anharmonic potential** Xinxin Rao, School of Physics and Astronomy, Sun Yat-Sen University.
P8	**Conductance Switch on Molecular Wheels Induced by Electric Field and Controlled by Molecular Rotation** Xiaobo Li, Hong Kong Baptist University.
P9	**Benzo[d]thiazol-3-ium contained red emitting probe for peroxynitrite sensing** Jingyun Tan, University of Macau.
P10	**Machine learning with quantum computation** Long Hin Li, The University of Hong Kong.
P11	**Solar vapor desalination of seawater** Yangshi Jin*, Chu Leung Chan and Xuming Zhang, The Hong Kong Polytechnic University.
P12	**Investigation on Tin-based anode materials for Na^{+} ion battery by in-situ TEM** Cheuk Ho Chan* and Ji-Yan Dai, The Hong Kong Polytechnic University.
P13	**Hydrostatic pressure effect on T_c of Mo_8Ga_{41} up to 72 kbar** Wei Zhang[1,*], King Yau Yip[1], Yuet Ching Chan[1], Chia Nung Kuo[2], Chin Shan Lue[2], Kwing To Lai[1], and Swee Kuan Goh[1] 1. The Chinese University of Hong Kong 2. National Cheng Kung University
P14	**Formation and Coalescence of Binary Black Holes in Active Galactic Nuclei: I - Capture of Nuclear Cluster Stars by Accretion Disks** Xiaojia Zhang[1,*], Zhuoxiao Wang[2], Douglas N. C. Lin[2,3,4], and Shude Mao[2,4,5] 1. The University of Hong Kong 2. Tsinghua University 3. University of California, Santa Cruz 4. National Astronomical Observatories of China 5. University of Manchester

Poster board #	Poster title and author
P15	**Bose Polarons in the Heteronuclear Bose-Bose Mixture** Lintao Li*, Zhichao Guo and Dajun Wang, The Chinese University of Hong Kong.
P16	**Realistic implementation of all-photonic quantum repeater** Ming Lai Chan, The University of Hong Kong.
P17	**Quantum droplet in a mixture of Rb-Na Bose-Einstein condensates** Zhichao Guo*, Lintao Li and Dajun Wang, The Chinese University of Hong Kong.
P18	**Exploration of the Energetic Material Ammonium Perchlorate at high pressures: Combined Raman Spectroscopy and X−ray Diffraction Study** Lei Kang and Qingguang Zeng, Wuyi University.
P19	**The scattering mechanism of $ZnSnN_2$** Xing-Min Cai, Bo Wang and Fan Ye, Shenzhen University.
P20	**MRT OBSERVATIONS ON H212CO AND H213CO TOWARD GALACTIC MOLECULAR CLOUDS** Yaoting Yan, Jiangshui Zhang and Christian Henkel, Guangzhou University.
P21	**Resolution criterion based on the nth-order derivative of the image that exceed the sparrow criterion** Yanming Gao and Xiangyang Yu, Sun Yat-Sen University.
P22	**Imaging through a thin scattering layer by wavelength-depth-matching method** Junpeng Xie, Sun Yat-Sen University.
P23	**Zero-Reflection effect Based on Graphene-dielectric Metamaterials** Wenyao Liang, South China University of Technology.
P24	**From Equilibrium to Wave Turbulence by Shaking in Holographic Superfluid** Shanquan Lan, Hong Liu, Yu Tian and Hongbao Zhang, Lingnan Normal University.
P25	**Joule-Thomson expansion of d-dimensional charged AdS black holes** Jie-Xiong Mo∗, Gu-Qiang Li, Shan-Quan Lan and Xiao-Bao Xu, Lingnan Normal University.
P26	**Photocatalytic properties of $Bi_2O_3/Bi_2VO_{5.5}$ laminated composite films** Wei Xie, Changwei Zou and Guiang Liu, Lingnan Normal University.
P27	**Extraction of cluster ion beams and application in synthesis of few-layer graphene on $Ni/SiO_2/Si$ substrate** Zesong Wang, Rui Zhang, Canxin Tian, Changwei Zou and Dejun Fu, Lingnan Normal University.
P28	**Synthesis and Microwave Absorption Enhancement of Yolk–Shell Carbon Microspheres** Chunhua Tian and Jun Quan*, Lingnan Normal University.
P29	**Chaoticons in highly nonlocal nonlinear optical media** Lanhua Zhong, Lingnan Normal University.
P30	**Microscopic piezoelectric theory of symmetry-broken sp^2-bonded hexagonal 2D crystals** Zongtan Wang, Yunhua Wang,* Jie Tan, Yulan Liu, and Biao Wang,* Sun Yat-Sen University
P31	**High-sensitivity topological insulator strain sensor** Lingzhi Li, Yunhua Wang,* Zongtan Wang, Yulan Liu, and Biao Wang,* Sun Yat-Sen University
P32	**Measurement of microwave-induced strain in a metallic parallel-plate cavity** M. Wang [1,2], S. Wang [2], Q. Zhang [1,2], C.T. Chan [2], H.B. Chan[1] [1]Department of Physics, The Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong [2]William Mong Institute of Nano Science and Technology, The Hong Kong University of Science and Technology, Clear Water Bay, Hong Kong, China

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Eg. Transport to and from different borders
Bring registration card for meals