

## Concurrent session 2: Atomic, Molecular and Optical Physics

Friday, July 27, 2018

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| 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  |
|               | <b>Microfluidics for artificial photosynthesis of carbohydrates</b><br>Xuming Zhang, The Hong Kong Polytechnic University. MC: Hin-Lap Yip                                  |
| 14:25 – 15:55 | Invited presentations   |
| 14:25 – 14:40 | <b>Fermi Liquid Properties for Weakly Repulsive p-wave Fermi Gases</b><br>Shanshan Ding, The University of Hong Kong. MC: Guichuan Xing                                     |
| 14:40 – 14:55 | <b>High-performance SERS substrates: fabrication and applications</b><br>YanJun Liu, Southern University of Science and Technology. MC: Guichuan Xing                       |
| 14:55 – 15:10 | <b>Heavy Metal Containing Terpolymers for Polymer Solar Cells</b><br>Youtian Tao, Nanjing Tech University. MC: Guichuan Xing  |
| 15:10 – 15:25 | <b>Test Lorentz invariance with trapped Yb<sup>+</sup> ions</b><br>Wu Bian, Sun Yat-sen University. MC: Guichuan Xing   |
| 15:25 – 15:40 | <b>Production of Ultracold Molecule with Zeeman Deceleration and Laser Catalyzed Reaction</b><br>Yang Liu, Sun Yat-sen University. MC: Guichuan Xing                        |
| 15:40 – 15:55 | <b>Structural Phase Transition and Optical Property Investigation of Perovskite Crystal</b><br>Rui Chen, Southern University of Science and Technology. MC: Guichuan Xing   |
| 15:55 – 16:05 | Contributed presentations   |
|               | <b>Dipolar collisions between ultracold NaRb molecules</b><br>Junyu He, The Chinese University of Hong Kong. MC: Guichuan Xing  |
| 16:05 – 16:25 | Tea/coffee break, poster, discussion  |
| 16:25 – 16:50 | Keynote presentation  |
|               | <b>Lead halide perovskite based optoelectronic devices and their applications</b><br>Qinghai Song, Harbin Institute of Technology Shenzhen Graduate School. MC: Youtian Tao |
| 16:50 – 17:50 | Invited presentations   |
| 16:50 – 17:05 | <b>All-dielectric valley photonic crystals: Paving the way to topological nanophotonics</b><br>Jian-Wen Dong, Sun Yat-sen University. MC: Youtian Tao                       |
| 17:05 – 17:20 | <b>Structural Engineering of Graphene for Flexible and Ultrasensitive Mechanical Sensors</b><br>Xuchun Gui, Sun Yat-sen University. MC: Youtian Tao                         |
| 17:20 – 17:35 | <b>Bright and Efficient Light-Emitting Diodes Based on Perovskite Quantum Dots</b><br>Kai Wang, Southern University of Science and Technology. MC: Youtian Tao              |

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| 17:35 – 17:50 | <b>Ultrafast Carrier Dynamics in few-Layer MoS<sub>2</sub></b><br>Zhaogang Nie, Guangdong University of Technology. MC: Youtian Tao                 |
| 17:50 – 18:00 | <b>Contributed presentations</b>  |
|               | <b>Persistent spin helix and its instability in spin-orbit coupled normal Bose gas</b><br>Wai Ho Tang, The University of Hong Kong. MC: Youtian Tao |
| After 18:05   | <b>Banquet Dinner (Hotel: Galaxy Macau, Bus pick-up point &amp; time: E4 G/F Lobby @ 18:05 pm)</b>  |

## Saturday, July 28, 2018

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