## **Program for Frontiers of Condensed Matter and Atomic Physics**

--Joint workshop of Pennsylvania State University and Peking University

Organizers: Qi Li (Pennsylvania State University), Xincheng Xie (Peking University)

| May 18 (Wed                           | nesday) morning Ying Jie Conference Center, Press room  |
|---------------------------------------|---|
| 9:45- 10:30                           | Ceremony  |
| 9.45- 10.50                           | President Spanier (Pennsylvania State University)   |
|                                       | President Zhou (Peking University)  |
| 11:00                                 | Lunch Banquet, Chia Tai International Center  |
| May 18 (Wed                           | Inesday) afternoon Ying Jie Conference Center, Press Hall   |
| 1:00-2:00                             | Joint session of all workshops  |
|                                       | Feng-Yun Lei(雷风云)   |
|                                       | (Vice General Director, State Administration of Foreign Experts Affairs) (中国国家外国专家局教科文卫司副司长)  |
|                                       | Prof. Zuoyan Zhu  |
|                                       | Member of Chinese Academy of Science,   |
|                                       | Former Vice President of National Natural Science Foundation of China Editor General of Science China, Editor General of Chinese Science Bulletin |
| May 18 (Wad                           | Inesday) afternoon Ying Jie Conference Center, Room 2   |
|                                       | Xincheng Xie  |
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| 2:20-2:30                             | Opening welcome remarks   |
|                                       | Prof. Daniel Larson   |
|                                       | (Dean, College of Science, Pennsylvania State University)   |
|                                       | Prof. Enge Wang (Provost, Dean, Peking University)  |
| May 18 (Wed                           | Inesday) afternoon Ying Jie Conference Center, Room 2   |
| Chair: Danie                          |   |
|                                       |   |
| 2:30-2:35                             | Overview of Department of Physics, Penn State   |
| 2.25 2.00                             | Moses Chan (Pennsylvania State University)  |
| 2:35 -3:00                            | Can a Solid be a Superfluid  Moses Chan   |
| 3:00-3:25                             | Energy Dissipation and Phase Coherence in Normal-metal/   |
|                                       | Superconductor Hybrid Devices   |
|                                       | Jian Wei (Peking University)  |
| 3:25-3:50                             | Destructive Regime and Quantum Superconducting Fluctuation in Ultrasmall Al Loops   |
| 2.50.4.00                             | Ying Liu (Pennsylvania State University)  |
| 3:50-4:00                             | Coffee Break, Ying Jie Conference Center  Inesday) afternoon Ying Jie Conference Center, Room 2   |
| Chair: Xinch                          |   |
|                                       |   |
| 4:00-4:25                             | Study of Resistance Switching in Oxide Heterostructures   |
|                                       | Jinbo Yang (Peking University.)   |
| 4:25-4:50                             | Electrical Control of Magnetic States Using Multiferroic Tunnel Junctions   |
|                                       | Qi Li (Pennsylvania State University)   |
| <b>4:</b> 50 <b>-</b> 5 <b>:</b> 15   | Light-element Alloys under High Pressure  Ji Feng (Peking University)   |
| 5:15 -5:40                            | Transport Studies of Individual Crystalline Nanowires Contacted   |
|                                       | by Superconducting Electrodes   |
|                                       | Jian Wang (Peking University)   |
| 6:00                                  | Workshop dinner, Chia Tai International Center  |

| Mar. 10 (Th.   | unader) marring ICOM Conference Boom (07 Science Building 5                                       |  |
|--|---|--|
| Chair: Qian  | ursday) morning ICQM Conference Room 607, Science Building 5                                      |  |
| Chair: Qian  | INIU  |  |
| 8:30-8:55  | Artificial Frustrated Magnets   |  |
| 0.30-0.33  | Peter Schiffer (Pennsylvania State University)  |  |
| 8:55-9:20  | Graphene on Metal Surfaces  |  |
|  | Zonghai Hu (Peking University)  |  |
| 9:20-9:45  | Semiconductor Nanospintronics   |  |
|  | Nitin Samarth (Pennsylvania State University)   |  |
| 9:45-10:10   | Bose-Einstein Condensate in a Honeycomb Optical Lattice:  |  |
|  | Fingerprint of Superfluidity at the Dirac Point   |  |
|  | Biao Wu (Peking University)   |  |
| 10:10-10:35  |   |  |
|  | Kurt Gibble (Pennsylvania State University)   |  |
|  |   |  |
|  | Coffee Break, ICQM Conference Room 607, Science Building 5  |  |
| The second secon | ursday) morning Room2736, 7 <sup>th</sup> Floor, Science Building 2                               |  |
| Chair: Enge  | e Wang  |  |
| 11 00 11 10  |   |  |
| 11:00-11:40  | Reaching Out, Reaching Across: The Global Research University                                     |  |
|  | Daniel Larson  (Vorse M. Willeman Deep of the Eherly College of Science (ECOS), Bonn State Univ.) |  |
|  | (Verne M. Willaman Dean of the Eberly College of Science (ECOS), Penn State Univ.)                |  |
| May 19 (Th   | ursday) morning ICQM Conference Room 607, Science Building 5                                      |  |
| Chair: Kurt Gibble   |   |  |
|  |   |  |
| 12:00 - 1:00   | Lunch time discussion of Penn State faculty with undergraduate students                           |  |
|  |   |  |
| <b>May 19 (Th</b> )  | ursday) afternoon ICQM Conference Room 607, Science Building 5                                    |  |
| Chair: Mose  | es Chan   |  |
|  |   |  |
| <b>1:3</b> 0-1:55  | Berry Phase in Condensed Matter Physics   |  |
|  | Qian Niu (Peking University)  |  |
| 1:55-2:20  | Composite Fermion Superconductor  |  |
|  | Jainendra Jain (Pennsylvania State University)  |  |
| 2:20-2:45  | Probing Electron-phonon Coupling in High-Tc Cuprates  |  |
|  | Junren Shi (Peking University)  |  |
| 2:45-3:00  | Coffee Prook ICOM   |  |
|  | Coffee Break, ICQM  |  |
| May 19 (Thursday) afternoon ICQM Conference Room 607, Science Building 5<br>Chair: Xincheng Xie and Nitin Samarth  |   |  |
| Chair : Aille  | nong the und Pittin Duniul in   |  |
| 3:00 – 4:10  | Panel discussions on areas collaborations and students training                                   |  |
| 2.00   | Tailer and an area conditions and stadents training   |  |
| 4:30   | President's alumni reception, Lake View Hotel   |  |
| 4  |   |  |