International Workshop: New Frontiers in Extremely Strongly Interacting Quantum Matter: Transport Dynamics, Quantum Hydrodynamics and Topological Matter

July 19 (Monday)	
08:00-08:10	Welcome by Wei Ku, Deputy director of Tsung-Dao Lee Institute
Session A: Quantum Dynamics and hydrodynamics	**Chair: Congjun Wu**
08:10-08:50	**Congjun Wu** (Westlake University) Space-time group for dynamic crystals
08:50-09:30	**Mark Ku** (University of Delaware) Hydrodynamic Dirac fluid in graphene
09:30-10:10	**Shizhong Zhang** (The University of Hong Kong) Viscosity in strongly interacting p-wave Fermi gas: role of p-wave effective range
10:10-10:25	**Tea/Coffee Break**
10:25-11:05	**Yusuke Nishida** (Tokyo University of Technology) Conformality, bulk viscosity, and contact correlation
11:05-11:45	**Da Wang** (Nanjing University) Are overdoped cuprates really extraodinary?
11:45-12:25	**Hong Yao** (Tsinghua University) Pair-density-wave superconductivity from the strong coupling limit of the 2D Holstein-Hubbard model
12:25-13:30	**Lunch**
July 20 (Tuesday)	
Session B: FQH Physics and beyond	**Chair: Kun Yang**
08:30-09:10	**Nick Bonesteel** (Florida State University) Composite Fermion Pairing and Pair Breaking in the nu=1/2+1/2 Quantum Hall Bilayer
09:10-09:50	**Israel Klich** (University of Virginia) Measurement induced chirality
09:50-10:30	**Zhao Liu** (Zhejiang University) Quench Dynamics of Collective Modes in Fractional Quantum Hall Systems
10:30-10:45	**Tea/Coffee Break**

10:45-11:25	**Wei Zhu** (Westlake University) Interface between Pfaffian and anti-Pfaffian Topological Orders: Implication for Thermal Hall Experiment of nu=5/2 state
11:25-12:05	**Jian Li** (Westlake University) TBA
12:05-13:30	**Lunch**
July 21 (Wednesday)	
Session C: Strong Interactions and beyond	**Chair: Fei Zhou**
08:30-09:10	**Sung Sik Lee** (Perimeter Institute) Spread of entanglement in relatively local theories
09:10-09:50	**Gordon Semenoff** (University of British Columbia) TBA
09:50-10:05	**Tea/Coffee Break**
10:05-10:45	**Sri Raghu** (Stanford University) Majorana fermion arcs and the local density of states of UTe$_2$
10:45-11:25	**Fei Zhou** (University of British Columbia) Some progress on topological quantum criticality: global symmetries and interacting majorana fermions
11:25-13:00	**Lunch**
13:00-13:40	**Jan Zaanen** (Leiden University) Quantum supreme matter and the strange metals
July 22 (Thursday)	
Session D: Topological order	**Chair: Zhengchen Gu**
08:30-09:10	**Zhengchen Gu** (The Chinese University of Hong Kong) Real-space construction of crystalline topological superconductors and insulators in 2D interacting fermionic systems
09:10-09:50	**Meng Cheng** (Yale University) Disorder operator in (2+1)d quantum phases and phase transitions
09:50-10:05	**Tea/Coffee Break**
10:05-10:45	**Chenjie Wang** (The University of Hong Kong) A few anomaly indicators for fermionic SET phases
10:45-11:25	**Xiongjun Liu** (Peking University) Emergent gapless topological Luttinger liquid
11:25-13:00	**Lunch**

13:00-13:40	**Sergej Moroz** (Technique University of Munich) Discrete Z_2 gauge theory coupled to single-component fermion matter: confinement, topological order and fractons

Note: The program time is based on Beijing Time.