Schedule

July 26, 2021 (Monday)	
07:30 – 08:00	On-site registration, the 2nd floor of Tsung-Dao Lee Institute
08:00 – 08:15	Welcome by Wei Ku, Deputy director of Tsung-Dao Lee Institute
08:15 - 08:30	Opening remark by Tao Xiang & Yannick Meurice
Session A:	**Chair: Zhiyuan Xie**
08:30 – 09:05	**Glen Evenbly** Reconstruction of Quantum Wavefunctions using Tensor Methods
09:05 – 09:40	**Yannick Meurice** Tensor methods and exact blocking for lattice gauge theory
09:40 – 10:10	**Tea/Coffee Break**
10:10 – 10:45	**Garnet Chan** Some developments in tensor networks in 2D and beyond
10:45 – 11:20	**Tomotoshi Nishino** Sine Square Deformation: accidental finding from the entanglement
12:00 – 14:30	**Lunch**
Session B:	**Chair: Tao Xiang**
14:30 – 15:05	**Frank Verstraete** Topological aspects of critical spin systems: a tensor network view
15:05 – 15:40	**Roman Orus** News on tensor network simulations for classical and quantum matter, and beyond
15:40 – 16:10	**Tea/Coffee Break**
16:10 – 16:45	**Guangming Zhang** Tensor network approach to phase fluctuations of a coupled superfluids/superconductors bilayer
16:45 – 17:20	**Honghao Tu** Tensor Networks for Projected Wave Functions
17:30 – 19:30	**Dinner**

July 27, 2021 (Tuesday)	
Session C:	**Chair: Yannick Meurice**
08:30 – 09:05	**James Osborn** Exploration of TRG Methods
09:05 – 09:40	**Shinji Takeda** Tensor network approach to real-time path integral
09:40 – 10:10	**Tea/Coffee Break**
10:10 – 10:45	**Judah Unmuth-Yockey** Effective Z_3 model for finite-density QCD with tensor networks
10:45 – 11:20	**Ryo Sakai** Tensor renormalization group analysis for reduced staggered fermions
11:20 – 11:55	**Ruizhen Huang** Boundary conformal field theory and uniform infinite matrix product state
12:00 – 14:30	**Lunch**
Session D:	**Chair: C.-J. David Lin**
14:30 – 15:05	**Karl Jansen** From tensor networks to quantum simulations in high energy physics
15:05 – 15:40	**Yoshinobu Kuramashi** Application of tensor renormalization group to Nambu-Jona-Lasinio model and Hubbard model
15:40 – 16:10	**Tea/Coffee Break**
16:10 – 16:45	**Jacques Bloch** Tensor network study of the 3d O(2) model at nonzero chemical potential and temperature
16:45 – 17:20	**Krzysztof Cichy** Phase structure and real-time dynamics of the Thirring model from matrix product states
17:20 – 17:55	**Erez Zohar** Gauged gaussian fermionic PEPS – studying Hamiltonian LGTs in more than 1+1d using tensor networks and Monte-Carlo
18:00 – 19:30	**Dinner**

July 28, 2021 (Wednesday)	
Session E:	**Chair: Haijun Liao**
08:30 – 09:05	**Pan Zhang** Exact computations in statistical mechanics and quantum circuit simulations with tensor networks
09:05 – 09:40	**Ling Wang** Quantum Criticality and Spin Liquid Phase in the Shastry-Sutherland model
09:40 – 10:10	**Tea/Coffee Break**
10:10 – 10:45	**Gang Su** Visualizing tensor network states and quantum phase transitions
10:45 – 11:20	**Daisuke Kadoh** Tensor network approach to 2d YM theory
11:20 – 13:00	**Lunch**
14:00-17:30	Excursion or Table Tennis
18:00-20:00	**Banquet**

July 29, 2021 (Thursday)	
Session F: Chair: Ying-Jer Kao	
09:00 – 09:35	**Shoushu Gong** Robust d-wave superconductivity in the square-lattice t-J model
09:35 – 10:10	**Pochung Chen** Two-wire Junction of Inequivalent Tomonaga-Luttinger Liquids
10:10 – 10:40	**Tea/Coffee Break**
10:40 – 11:15	**Naoki Kawashima** Classically representable quantum states
11:15 – 11:50	**Lixin He** Simulation of the Ring-exchange Models with PEPS
12:00 – 14:30	**Lunch**
Session G: Chair: Wei Li	
14:30 – 15:05	**Shuo Yang** Tensor network representation of fermionic crystalline topological phases on two dimensional lattice
15:05 – 15:40	**Jiyao Chen** Generating function for tensor network diagrammatic summation
15:40 – 16:10	**Tea/Coffee Break**
16:10 – 16:45	**Shiju Ran** Simulating Quantum Many-body Systems by Few-body Models at Zero and Finite Temperatures
16:45 – 17:20	**Jutho Haegeman** Generalised Gross-Neveu model and chiral summetry on the lattice
17:20 – 17:55	**Wenyuan Liu** Emergent gapless spin liquid in two-dimensional frustrated magnets
18:00 – 19:30	**Dinner**

July 30, 2021 (Friday)	
Session H:	**Chair: Haiyuan Zou**
09:00 – 09:35	**Haijun Liao** Thermodynamic Signatures of the Gapless Kagome Spin Liquid
09:35 – 10:10	**Tao Shi** Non-Gaussian Variational Approach to 1D Lattice Gauge Theories
10:10 – 10:40	**Tea/Coffee Break**
10:40 – 11:15	**Shenghan Jiang** Symmetric liquid phases in fermionic tensor network states
11:15 – 11:50	**Wei Li** Identification of Magnetic Interactions and High-field Quantum Spin Liquid in α-RuCl$_3$
12:00 – 14:30	**Lunch**