

Schedule

January 13, 2025, Monday

| Time 日期 | Name 报告人 | Title 报告题目 |
|---------------|----------------------|--|
| 7:30-8:30 | Breakfast | |
| 9:00 - 9:45 | Yasuyuki Kawahigashi | Modular invariance in conformal field theory |
| 9:50 - 10:35 | Yue Yang(杨越) | Quantum computing of fluid dynamics via Hamiltonian simulation |
| 10:40 - 11:10 | Tea Break | |
| 11:10 - 11:55 | Xiaoyu Dong(董小玉) | Kiteav quantum double |
| 12:00 - 13:30 | Lunch | |
| 14:00 - 14:45 | Guoyi Zhu(朱国毅) | Mixed state phase transitions: Ising, Nishimori and self-duality |
| 14:50 - 15:35 | Xin Wang(王鑫) | Reverse unknown quantum processes |
| 15:40 - 16:10 | Tea Break | |
| 16:10 - 16:55 | Jinguo Liu(刘金国) | Automated Discovery of Branching Rules with Optimal Complexity for the Maximum Independent Set Problem |
| 17:30-19:00 | Dinner | |

January 14, 2025, Tuesday

| Time 日期 | Name 报告人 | Title 报告题目 |
|---------------|---------------------|--|
| 7:30-8:30 | Breakfast | |
| 9:00 - 9:45 | Robert James Joynt | Adaptive quantum optimization algorithms |
| 9:50 - 10:35 | Qiongyi He(何琼毅) | Testing non-Gaussian entanglement and its applications |
| 10:40 - 11:10 | Tea Break | |
| 11:10 - 11:55 | Chenfeng Cao(曹晨风) | Barren Plateaus and Local Traps: Solutions via Many-Body Localization and Applications to Phase Transition Detection |
| 12:00 - 13:30 | Lunch | |
| 14:00 - 14:45 | Keren Li(李可仁) | Using quantum gradients to optimize parameterized quantum circuits |
| 14:50 - 15:35 | Chenjie Wang(王晨杰) | A study of 1D lattice models with exact fusion category symmetry |
| 15:40 - 16:10 | Tea Break | |
| 16:10 - 16:55 | Jie Wang(王杰) | Noncommutative polynomial optimization and Bell inequalities |
| 17:30-19:00 | Dinner | |

January 15, 2025, Wednesday

| Time 日期 | Name 报告人 | Title 报告题目 |
|-----------------|-------------------------|---|
| 7:30-8:30 | Breakfast | |
| 9:00 - 9:45 | Shi Jin(金石) | Dimension liftings for quantum Computation of partial differential equations and related problems |
| 9:50 - 10:35 | Masahito Hayashi(林正人) | Generalized Quantum Stein's Lemma and Second Law of Quantum Resource Theories |
| 10:40 - 11:10 | Tea Break | |
| 11:10 - 11:55 | Huangjun Zhu(朱黄俊) | Randomized quantum measurements in quantum information processing |
| 12:00 - 13:30 | Lunch | |
| Free discussion | | |
| 17:30-19:00 | Dinner | |

January 16, 2025, Thursday

| Time 日期 | Name 报告人 | Title 报告题目 |
|---------------|-------------------------|---|
| 7:30-8:30 | Breakfast | |
| 9:00 - 9:45 | Hsi-Sheng Goan(管希聖) | Quantum algorithms and applications in the noisy intermediate-scale quantum era |
| 9:50 - 10:35 | Kwek Leong Chuan(郭龙泉) | Mathematical Aspect of Boson Sampling |
| 10:40 - 11:10 | Tea Break | |
| 11:10 - 11:55 | Kun Fang(方堃) | Generalized quantum asymptotic equipartition |
| 12:00 - 13:30 | Lunch | |
| 14:00 - 14:45 | Junyu Liu(刘峻宇) | On the boundary of quantum computing advantage |
| 14:50 - 15:35 | Xiaozhen Fu(付小真) | Error Correction in Dynamical Codes |
| 15:40 - 16:10 | Tea Break | |
| 16:10 - 16:55 | Iman Marvian Mashhad | |
| 17:30-19:00 | Dinner | |

January 17, 2025, Friday

| Time 日期 | Name 报告人 | Title 报告题目 |
|---------------|--------------------|---|
| 7:30-8:30 | Breakfast | |
| 9:00 - 9:45 | Chaoyang Lu(陆朝阳) | From Science-for-QC to QC-for-Science |
| 9:50 - 10:35 | Peng Ye(叶鹏) | Three-dimensional fracton topological orders with boundary Toeplitz braiding |
| 10:40 - 11:10 | Tea Break | |
| 11:10 - 11:55 | Chendi Wang(王晨笛) | Leveraging Harmonic Analysis and Discrete Mathematics to Strengthen the Privacy of U.S. Census Data |
| 12:00 - 13:30 | Lunch | |
| 14:00 - 14:45 | Shuo Yang(杨硕) | Strong-to-weak spontaneous symmetry breaking meets average symmetry-protected topological order |
| 14:50 - 15:35 | Yuguo Shao(邵钰堃) | Pauli path integral for simulating noisy variational quantum algorithm |
| 15:40 - 16:10 | Tea Break | |
| 16:10 - 16:55 | | |
| 17:30-19:00 | Dinner | |