

Strongly Interacting Conformal Field Theory in Condensed Matter Physics Program

6.25	
Opening and Chair: Zheng-Yu Weng (Tsinghua)	
9:30-10:30 a.m.	Subir Sachdev (Harvard University) Equilibrium and Non-equilibrium Dynamics of Sachdev-Ye-Kitaev Models
10:30-11:00 a.m.	Break
11:00-12:00p.m.	Chaoming Jian (UCSB) Instabilities of the Non-Fermi Liquid States in the Sachdev-Ye-Kitaev Model and its Generalizations
12:00-2:00 p.m.	Lunch Break
Chair: Hong Yao (Tsinghua)	
2:00-3:00p.m.	Ehud Altman (Berkeley) Classical Geometric Interpretation for Maximal Quantum Chaos
3:00-4:00p.m.	Shao-Kai Jian (Tsinghua) Solvable SYK Models in Higher Dimensions: from Diffusion to Many-body Localization
4:00-4:30p.m.	Break
4:30-5:30p.m.	Pengfei Zhang (Tsinghua) From Generalizations of Sachdev-Ye-Kitaev Models to the Relation between OTOC and Entropy

6.26	
Chair: Hui Zhai (Tsinghua)	
9:30-10:30 a.m.	Chong Wang (Harvard) A Web of Dualities in Condensed Matter Physics: from Quantum Hall Effect to Exotic Quantum Criticality
10:30-11:00 a.m.	Break
11:00-12:00p.m.	Yi-Zhuang You (Harvard) Topological Phase Transitions: From Duality Web to Symmetric Mass Generation
12:00-2:00 p.m.	Lunch Break
Chair: Cenke Xu (UCSB)	
2:00-3:00p.m.	Sri Raghu (Stanford) Exact Boson-Fermion Duality on a 3D Euclidean Lattice
3:00-4:00p.m.	Shamit Kachru (Stanford) Mirror Duality and Bosonization
4:00-4:30p.m.	Break
4:30-5:30 p.m.	Yong-Shi Wu (Utah) Network Gauge Theories and Topological Phases

6.27	
Chair: Chaoming Jian (UCSB)	
9:30-10:30 a.m.	Herman Verlinde (Princeton) Solving the Schwarzian with the Conformal Bootstrap
10:30-11:00 a.m.	Break
11:00-12:00p.m.	Xiao-Liang Qi (Stanford) Diffusion, Chaos and Quantum Entanglement in Generalized Sachdev-Ye-Kitaev Models
12:00-2:00 p.m.	Lunch Break
Chair and Discussion Leader: Xiaoliang Qi (Stanford)	
2:00-3:00p.m.	Jan Zaanen (Leiden) String Theorists Need Eddington
3:00-4:00p.m.	Dmitry Bagrets (Cologne) Sachdev-Ye-Kitaev Model as a Liouville Quantum Mechanics
4:00-4:30p.m.	Break
4:30-5:30p.m.	Discussion Session