

OCA10 2026 Statistical Mechanics & Nonlinear Physics Schedule & Timetable

Day 1 (Monday 22 June)

SM1 | Room 310

Chair: Hong Zhao

Time	Speaker	Presentation Title
1:30–1:55	Hong Zhao	Universal Rate of Thermalization in One-Dimensional Lattices
1:55–2:20	Xinzheng Li	Fermion Sign Problem and Lee-Yang Phase Transition Theory
2:20–2:45	Hai-Bin Yu	Configuration distance and double percolation of glassy dissipations
2:45–3:05	Kavan Modi	Operational Metric for Quantum Chaos and the Corresponding Spatiotemporal Entanglement Structure
3:05–3:25	Lih-King Lim	Mesoscopic Fluctuations in Entanglement Dynamics

SM2 | Room 310

Chair: Liu Junjie

Time	Speaker	Presentation Title
3:50–4:15	Liu Junjie	Quantum information-thermodynamic cost relations beyond Landauer's principle
4:15–4:40	Hui Dong	Finite-time thermodynamics: Integrating dynamics into thermodynamics
4:40–5:05	Dawei Lu	Experimental Quantum Thermodynamics using Nuclear Magnetic Resonance
5:05–5:25	Fanming Cui	Finite-Time Thermodynamics Perspective into Nuclear Power Plant Heat Cycle

Day 2 (Tuesday 23 June)

SM3 | Room 310

Chair: Wencheng Ji

Time	Speaker	Presentation Title
1:30–1:55	Wencheng Ji	Role of Excitations in Supercooled Liquids
1:55–2:20	Liang Huang	Granular gas thermodynamics
2:20–2:45	Zonghua Liu	The Physical Mechanisms of Brain Functions
2:45–3:05	Hongbo Huang	Time-optimal Qubit Reset via Environmental Spectral Structure

SM4 | Room 310

Chair: Guimei Zhu

Time	Speaker	Presentation Title
3:50–4:15	Guimei Zhu	Advanced Thermal Management Materials for Electronic Packaging
4:15–4:40	Yunshan Zhao	Novel Phonon Thermal Transport in Quantum Two-Dimensional Materials
4:40–5:05	Yuanguang Zhou	Energy Transport in Superionic Crystals
5:05–5:30	Qiyue Zheng	Topside thermal mapping of phonon non-equilibrium in-operando nanodevices by electronic Doppler broadening

Day 3 (Wednesday 24 June)

SM5 | Room 310

Chair: Baowen Li

Time	Speaker	Presentation Title
1:30–1:55	Jiangbin Gong	Statistics of Fluctuations in Anderson Localization
1:55–2:20	Bijay Agarwalla	Invited Talk
2:20–2:45	Jingtao Lu	Current-driven Archimedes chiral molecular motor
2:45–3:10	Lifa Zhang	Chiral phonons and emergent novel effects

SM6 | Room 310

Chair: Jingtao Lu

Time	Speaker	Presentation Title
3:50–4:15	Jie Chen	Machine Learning Approach for Heat Conduction in Realistic Materials
4:15–4:40	Huanan Li	Manipulating evanescent waves with non-Hermitian spectral singularities
4:40–5:05	Yong Xu	Deep Learning of Electronic Structure: Challenges and Opportunities
5:05–5:30	Jian-Sheng Wang	From Monte Carlo to nonequilibrium Green's functions