

Scientific Program

Plenary Session (Day 4)

Morning, July 16, 2026

Swan Lake Hall, 1st Floor

Time	Speaker & Talk Title	Chair
09:00-09:40	Opening Ceremony	
09:40-10:10	Luc Bergé (The French Alternative Energies and Atomic Energy Commission) TW-class Laser-driven Terahertz Pulses	Zhiyi Wei (Institute of Physics, Chinese Academy of Sciences)
10:10-10:40	Donglai Feng (ShanghaiTech University) The Subtle Art of Spin and Charge: From Electron-Magnon Coupling to Multiferroic Textures in Layered Magnets	
Break (30 minutes)		
11:10-11:40	Changqing Jin (Institute of Physics, Chinese Academy of Sciences) High Pressure Superconductors	Jianlin Luo (Institute of Physics, Chinese Academy of Sciences)
11:40-12:10	Yuanbo Zhang (Fudan University) 2D Materials in the Expanding Flatlands	
12:10-14:00	Lunch (Yanming Hall, 1 st Floor)	

Afternoon, July 16, 2026

Swan Lake Hall, 1st Floor

Time	Speaker & Talk Title
16:30-16:50	Hongming Weng (Institute of Physics, Chinese Academy of Sciences) Building the Data Foundation of Large-Scale Scientific Facilities for AI4S/ 面向 AI4S 的大科学装置数据底座建设
16:50-17:50	User Exchange Meeting (Panel Discussions) 用户交流会
18:30-20:00	Dinner



Abstracts Collection - Conference

Parallel Session 1 (Day 4)

Emergent quantum materials and phenomena under high pressures

Afternoon, July 16, 2026

Yuelu Hall, 1st Floor

Time	Speaker & Talk Title	Chair
14:00-14:20	Mingliang Tian (High Magnetic Field Laboratory, Chinese Academy of Sciences) Polarity-tunable Time-reversal Symmetric Superconducting Diode Effects in Gate-defined Homojunctions	Jinguang Cheng (Institute of Physics, Chinese Academy of Sciences)
14:20-14:40	Hiroki Takahashi (Nihon University) Progress and Perspectives in High-pressure Superconductivity Research: from Cuprates to the Present	
14:40-15:00	Zhongyi Lu (Renmin University of China) Type-II Quantum Spin Hall Insulators without Time-Reversal Symmetry	
15:00-15:20	Tuson Park (Sungkyunkwan University) Emergence of Pseudogap in the Pressure-induced Heavy Fermion Superconductors	
15:20-15:40	Jian Sun (Nanjing University) Machine Learning Driven Materials Simulation and its Applications	
15:40-16:00	Kazuyuki Matsubayashi (The University of Electro-Communications) Pressure-induced Superconductivity in Narrow-gap Semiconductors near the Semiconductor-semimetal Boundary	
Break (30 minutes)		
16:30-17:50	This time slot is reserved for the plenary session. Please refer to the plenary session schedule in Page 6.	
18:30-20:00	Dinner	

Parallel Session 1 (Day 5)

Emergent quantum materials and phenomena under high pressures

Morning, July 17, 2026

Yuelu Hall, 1st Floor

Time	Speaker & Talk Title	Chair
09:00-09:20	Shuang Jia (Peking University) Giant Anomalous Hall and Nernst Effects in Ce-based Heavy Fermions	Zhongyi Lu (Renmin University of China)
09:20-09:40	Zhiwei Wang (Beijing Institute of Technology) Crystal Growth and Physical Property Manipulation of Quantum Materials	
09:40-10:00	Yanfeng Guo (ShanghaiTech University) Symmetry Manipulation to Unlock Exotic Superconductivity in Transition Metal Dichalcogenides	
Break (30 minutes)		
10:30-10:50	Xiangfeng Zhou (Yanshan University) Precursor-derived Boron Allotrope with Unprecedented Conductivity and Plasticity	Shuang Jia (Peking University)
10:50-11:10	Jiayu Dai (National University of Defense Technology) Evolution of Material Structures under Shock Compression	
11:10-11:30	Xin Lu (Zhejiang University) Andreev Reflection as a New Method to Probe Momentum-dependent Spin Polarization in Altermagnet	
11:30-11:50	Jinglei Zhang (High Magnetic Field Laboratory, Chinese Academy of Sciences) Observation of Giant Nernst Plateau in Ideal 1D Weyl Phase	
11:50-14:00	Lunch (Yanming Hall, 1 st Floor)	

Afternoon, July 17, 2026

Yuelu Hall, 1st Floor

Time	Speaker & Talk Title	Chair
14:00-14:20	Sergey Medvedev (Max Planck Institute for Chemical Physics of Solids) Pressure-induced Superconductivity in Polymorphsten of RhBi ₂	Kazuyuki Matsubayashi (The University of Electro-Communications)
14:20-14:40	Liling Sun (Center for High Pressure Science & Technology Advanced Research) Superconducting Quantum Phase Transition in Pressurized Cuprates	
14:40-15:00	Miho Itoi (Tokyo City University) Superconductivity and Crystal Structure of (TMTTF) ₂ X under High Pressure	
15:00-15:20	Wentao Jin (Beihang University) High-pressure Neutron and Resonant X-ray Studies of Strongly Correlated Electron Materials	
15:20-15:40	Tao Dong (Shanghai Jiao Tong University) Probing Superconductivity by Ultrafast Spectroscopy under Pressure	
Break (30 minutes)		
16:10-16:30	Stanley Tozer (National High Magnetic Field Laboratory) Non-zero Resistance in the Suoerhydrides	Sergey Medvedev (Max Planck Institute for Chemical Physics of Solids)
16:30-16:50	Yoshiya Uwatoko (The University of Tokyo) Lattice-driven Superconductivity in CeZn under Pressure	
16:50-17:10	Takahiro Sakurai (The University of Osaka) Development of High-pressure High-field ESR Systems and Its Application to Quantum Magnets	
17:10-17:30	Victor D. Selemir (Russian Federal Nuclear Center) TBA	
17:30-17:50	Bin Shen (Nanjing University) Emergent Transport Phenomena near Magnetic Instabilities in a New Family of Kagome Materials	
17:50-18:10	Qing Li (Nanjing University) Unconventional Superconductivity in UAs ₂ under Pressure	
18:10-20:00	Dinner (Yanming Hall, 1 st Floor)	

Parallel Session 1 (Day 6)

Emergent quantum materials and phenomena under high pressures

Morning, July 18, 2026

Yuelu Hall, 1st Floor

Time	Speaker & Talk Title	Chair
09:00-09:20	Jinlong Zhu (Southern University of Science and Technology) Evolution and Superconducting Behavior in Topological Materials under High Pressure	Yoshiya Uwatoko (The University of Tokyo)
09:20-09:40	Jianjun Ying (University of Science and Technology of China) Pressure Effect of Transition Metal Oxychalcogenides	
09:40-10:00	Pengfei Shan (Center for High Pressure Science & Technology Advanced Research) Discovery of Record-breaking High-Tc Superconductivity among 5d Transition-metal-oxides up to 17.8 K in ReO ₃	
10:00-10:20	Hanming Ma (Institute of Physics, Chinese Academy of Sciences) Probing Local Atomic Coordination Near Quantum Criticality: Insights from High-pressure Single-crystal X-ray Diffraction	
10:20-10:40	Tong Shi (Institute of Physics, Chinese Academy of Sciences) Superconductivity Under Pressure in the 2D van der Waals Heavy-fermion Metal CeSiI	
Break (20 minutes)		
11:00-11:20	Xiyu Zhu (Nanjing University) Exploration of New Ruddlesden-popper Nickelates via High-temperature High-pressure Synthesis	Yanfeng Guo (ShanghaiTech University)
11:20-11:40	Bjorn Winkler (Goethe University Frankfurt) Novel Carbonates from H ₂ CO ₃ to U ₂ [CO ₃] ₃	
11:40-12:00	Cao Wang (Shandong University of Technology) Exploring New Layered Compounds and an "Excision" Route toward New Superconductors	
12:00-12:20	Jie Chen (Beijing Institute of Technology) Novel Physical Properties and Pressure Effects in 5d Transition-metal Oxides	
12:20-14:00	Lunch (Yanming Hall, 1 st Floor)	

Parallel Session 2 (Day 4)

Novel physical properties of materials under extreme conditions

Afternoon, July 16, 2026

Lizheng Hall, 1st Floor

Time	Speaker & Talk Title	Chair
14:00-14:20	Ming Shi (Zhejiang University) Symmetry Reduction in the Electronic Structure of Titanium-based Kagome Lattices	Jianlin Luo (Institute of Physics, Chinese Academy of Sciences)
14:20-14:40	Kui Jin (Institute of Physics, Chinese Academy of Sciences) Origin of Enhanced Superconductivity in FeSe	
14:40-15:00	Tao Wu (University of Science and Technology of China) Unconventional Density-wave State in Ruddlesden-popper Nickelate La ₄ Ni ₃ O ₁₀	
15:00-15:20	Jiaxin Yin (Southern University of Science and Technology) Topological Pair Density Wave	
15:20-15:40	Dongfei Wang (Beijing Institute of Technology) Investigation of Low-energy Bound State in an Iron-based Superconductor Fe(Te,Se) with Spin Polarized STM	
15:40-16:00	Yu Song (Zhejiang University) Soft Phonon Charge-density-wave Formation in Kagome Metals	
Break (30 minutes)		
16:30-17:50	This time slot is reserved for the plenary session. Please refer to the plenary session schedule in Page 6.	
18:30-20:00	Dinner	

Parallel Session 2 (Day 5)

Novel physical properties of materials under extreme conditions

Morning, July 17, 2026

Lizheng Hall, 1st Floor

Time	Speaker & Talk Title	Chair
09:00-09:20	Sohn Byungmin (Sungkyunkwan University) Coexisting Kagome and Heavy Fermion Flat Bands in YbCr ₆ Ge ₆	Jianxin Li (Nanjing University)
09:20-09:40	Goh Swee Kuan (The Chinese University of Hong Kong) Magnetotransport Studies of Thin Cr- and V-based Kagome Metals under Pressure	
09:40-10:00	Motoi Kimata (Japan Atomic Energy Agency) Nonreciprocal Transport Phenomena in Symmetry-broken Antiferromagnets	
10:00-10:20	Milan Radovic (Paul Scherrer Institute) Engineering Emergent Magnetism and Novel Electronic Phases in Correlated Oxide Heterostructures	
Break (20 minutes)		
10:40-11:00	Weiqliang Yu (Renmin University of China) NMR Search for Quantum Spin Liquids and Spinon Excitations	Guangming Zhang (ShanghaiTech University)
11:00-11:20	Yoshihiko Ihara (Hokkaido University) Exploring Field-induced Magnetic States by NMR Spectroscopy in Pulsed Magnetic Fields	
11:20-11:40	Song Bao (Nanjing University) Discovery of Magnetic Chiral Phonons in Multiferroic Fe _{2-x} Zn _x Mo ₃ O ₈	
11:40-12:00	Xingye Lu (Beijing Normal University) Magnetic Excitations in Biaxial-strain Detwinned α-RuCl ₃	
12:00-14:00	Lunch (Yanming Hall, 1 st Floor)	

Afternoon, July 17, 2026

Lizheng Hall, 1st Floor

Time	Speaker & Talk Title	Chair
14:00-14:20	Jianxin Li (Nanjing University) Mott Physics and Topological Spin Excitations in Moiré Flat-band Systems	Ming Shi (Zhejiang University)
14:20-14:40	Guangming Zhang (ShanghaiTech University) Multi-orbital Theory for the Infinite-layer and Bi-layer Nickelate Superconductors	
14:40-15:00	Xiao Hu (Shanghai University) Novel Phenomena of Multi-component Superconductivity	
15:00-15:20	Ning Hao (Hefei Institutes of Physical Science, Chinese Academy of Sciences) Topological Superconductivity and Exotic Low-energy Localized States	
15:20-15:40	Quansheng Wu (Institute of Physics, Chinese Academy of Sciences) New Paradigm: Magnetotransport + First-Principles->Electronic-Structure Characterization	
Break (30 minutes)		
16:10-16:30	Yang Sun (Chongqing University) From Quantum Paraelectricity to Quantum Electric-dipole Liquid	Xiao Hu (Shanghai University)
16:30-16:50	Lin Jiao (Zhejiang University) Intrinsic Transverse Magnetic Nonreciprocal Response in a Chiral Antiferromagnet	
16:50-17:10	Zhenyu Wang (University of Science and Technology of China) Visualizing the Fingerprint Spin Texture of Altermagnets at Atomic Scale	
17:10-17:30	Hong-Hao Tu (Ludwig-Maximilians-University) Projected Bosonic Gaussian Wave Functions for Quantum Magnets	
17:30-17:50	Wei Peng (Hunan University) Ferroelastic Control of Ferromagnetic Metallic Oxides	
17:50-18:10	Yixi Su (Jülich Centre for Neutron Science JCNS at MLZ, Germany) Re-examination of the Zigzag Magnetic Order in the Kitaev Magnet α -RuCl ₃ via Polarized Neutron Scattering: Tilted and Twisted Magnetic Moments	
18:10-20:00	Dinner (Yanming Hall, 1 st Floor)	

Parallel Session 2 (Day 6)

Novel physical properties of materials under extreme conditions

Morning, July 18, 2026

Lizheng Hall, 1st Floor

Time	Speaker & Talk Title	Chair
09:00-09:20	Qi Zhang (Nanjing University) Coherent Magnon-phonon Three-wave Mixing in a van der Waals Antiferromagnet	Qingming Zhang (Institute of Physics, Chinese Academy of Sciences)
09:20-09:40	Luyi Yang (Tsinghua University) Terahertz Frequency Upconversion in a Narrow Gap Semiconductor	
09:40-10:00	Likun Wang (Zhejiang University) Probing Atomic-scale Surface Electrostatic Fields with an Ultrafast Molecular Quantum Sensor	
10:20-10:40	Junfeng He (University of Science and Technology of China) Electronic Structure of RP Phase Nickelate Superconducting Films	
Break (20 minutes)		
10:40-11:00	Jianhua Liu (Institute of Electrical Engineering of the Chinese Academy of Sciences) High-field All-superconducting Magnets: Advances at IEE, CAS	Rui Zhou (Institute of Physics, Chinese Academy of Sciences)
11:00-11:20	Kang Wang (High Magnetic Field Laboratory, Chinese Academy of Sciences) Compact Dynamic Cantilever Magnetometry	
11:20-11:40	MiaoLing Lin (Institute of Semiconductors, Chinese Academy of Sciences) Phonon Broadening in Real Atomically Thin 2D Crystals	
11:40-14:00	Lunch (Yanming Hall, 1 st Floor)	

Parallel Session 3 (Day 4)

Quantum transport in low dimensional materials and quantum devices at ultralow temperatures

Afternoon, July 16, 2026

Dragon Gate Hall, 1st Floor

Time	Speaker & Talk Title	Chair
14:00-14:20	Zhimin Liao (Peking University) Josephson Diode Effect in Topological and Kagome Metals	Ke He (Tsinghua University)
14:20-14:40	Chunyu Guo (Max Planck Institute for Structural and Dynamics of Matter) Interweaving Electronic Orders and Collective Quantum Effects in Kagome Materials	
14:40-15:00	Ben-Chuan Lin (Shenzhen International Quantum Academy) Unconventional Superconductivity in Vanadium-based Kagome Superconductors	
15:00-15:20	Xiao Lin (Westlake University) Nonvolatile Electrical Switch of Critical Current in Cross-bar Superconducting Junctions	Zhimin Liao (Peking University)
15:20-15:40	Haitao Yang (Institute of Physics, Chinese Academy of Sciences) Evolution of Kagome Materials with Unusual Correlated Electronic States	
15:40-16:00	Ziji Xiang (University of Science and Technology of China) Unusual Superconducting Phase Emerging from a Charge-stripe State in Sn-doped CsV ₃ Sb ₅	
Break (30 minutes)		
16:30-17:50	This time slot is reserved for the plenary session. Please refer to the plenary session schedule in Page 6.	
18:30-20:00	Dinner	

Parallel Session 3 (Day 5)

Quantum transport in low dimensional materials and quantum devices at ultralow temperatures

Morning, July 17, 2026

Dragon Gate Hall, 1st Floor

Time	Speaker & Talk Title	Chair
09:00-09:20	Zhong Wan (The University of Hong Kong) TBA	Jian Shen (Fudan University)
09:20-09:40	Oleksandr Zheliuk (HFML-FELIX Radboud University) Tailoring the Electronic Structure of Quantum Materials under Extreme Conditions	
09:40-10:00	Zheng Han (Shanxi University) TBA	
10:00-10:20	Hao Zheng (Shanghai Jiao Tong University) TBA	
Break (20 minutes)		
10:40-11:00	Ke He (Tsinghua University) Planar PbTe-Pb Nanowires with Robust Zero Modes in Ballistic Regime	Yuanbo Zhang (Fudan University)
11:00-11:20	Jakob Schluck (University of Cologne) Experiments on Side-contacted Topological Insulator Josephson Junctions	
11:20-11:40	Kai Chang (Beijing Academy of Quantum Information Sciences) Spin-valley Locking 1D Semiconducting States in Lateral Heterostrures	
11:40-12:00	Fan Yang (Tianjin University) Superconductivity of Polycrystalline Pd ₃ Bi ₂ Se ₂ Films	
12:00-14:00	Lunch (Yanming Hall, 1 st Floor)	

Afternoon, July 17, 2026

Dragon Gate Hall, 1st Floor

Time	Speaker & Talk Title	Chair
14:00-14:20	Weiting Wang (Tsinghua University) Quantum Acoustodynamics in Hybrid Superconducting-phononic Integrated Circuits	Hao Zheng (Shanghai Jiao Tong University)
14:20-14:40	Ming Gong (University of Science and Technology of China) Progress in Zuchongzhi-3 Superconducting Quantum Computing	
14:40-15:00	Zhirong Lin (Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences) High-fidelity Quantum-gate Operations Based on Superconducting Electronics at Millikelvin Temperatures	
15:00-15:20	Fei Yan (Beijing Academy of Quantum Information Sciences) Non-local and Non-markovian Effects of a Microscopic Two-level Defect in Superconducting Quantum Circuits	Yu Ye (Peking University)
15:20-15:40	Mingtang Deng (National University of Defense Technology) Flux Noise Probed by Doubly Connected Gradiometric Transmon Qubits	
15:40-16:00	Junhao Lin (Southern University of Science and Technology) Operando and Cryogenic Electron Microscopy of Low-dimensional Quantum Materials and Devices	
Break (20 minutes)		
16:20-16:40	Jian Shen (Fudan University) High-speed Neuromorphic Computing Based on Physical Evolution Process	Mingtang Deng (National University of Defense Technology)
16:40-17:00	Hongqi Xu (Peking University) TBA	
17:00-17:20	Haowei Xu (City University of Hong Kong) Novel Quantum Effects in Intrinsic Condensed Matter Systems: Cooperativity and Non-hermiticity	
17:20-17:40	Peng Yu (University of Chinese Academy of Sciences) Engineering Josephson Junction Geometry for an Enhanced Induced Gap and Diode Effect	

17:40-18:00	Baojuan Dong (Shanxi University) Quantized Landau-level Crossing Checkerboards for Cryogenic Magnetometry	
18:00-20:00	Dinner (Yanming Hall, 1 st Floor)	

Parallel Session 3 (Day 6)

Quantum transport in low dimensional materials and quantum devices at ultralow temperatures

Morning, July 18, 2026

Dragon Gate Hall, 1st Floor

Time	Speaker & Talk Title	Chair
09:00-09:20	Chunxiao Liu (Shanghai Jiao Tong University) Majorana Zero Modes in Quantum Dot Kitaev Chain Devices	Hongqi Xu (Peking University)
09:20-09:40	Jiyin Wang (Beijing Academy of Quantum Information Sciences) Ge Hole Quantum Devices with Low Charge Noise	
09:40-10:00	Xin Zhang (Institute of Physics, Chinese Academy of Sciences) Spin Helix Eigenstates in the Anisotropic Heisenberg Model	
10:00-10:20	Xi Lin (Peking University) Zero-field Thermal Hall Effect in Insulator	
Break (20 minutes)		
10:40-11:00	Yu Ye (Peking University) TBA	Zheng Han (Shanxi University)
11:00-11:20	Tingxin Li (Shanghai Jiao Tong University) Fractional Topological Phases and Unconventional Superconductivity in Twisted MoTe ₂	
11:20-11:40	Xiaoxiang Xi (Nanjing University) Interlayer-coupling Control of Symmetry-broken Phases in Low-dimensional Quantum Materials	
11:40-12:00	Yi Liu (Renmin University of China) Quantum Griffiths Singularity in a Three-dimensional Superconductor to Insulator Transition	
12:00-14:00	Lunch (Yanming Hall, 1 st Floor)	

Parallel Session 4 (Day 4)
Ultrafast physics and technology

Afternoon, July 16, 2026

Yingtian Hall, 1st Floor

Time	Speaker & Talk Title	Chair
14:00-14:20	Jian Wu (East China Normal University) Quantum Boost Electron Tunneling from an Atom	Hao Teng (Institute of Physics, Chinese Academy of Sciences)
14:20-14:40	Andong Xia (Beijing University of Posts and Telecommunications) Excimer Formation Driven by Excited-state Structural Relaxation in a Covalent Aminonaphthalimide Dimer	
14:40-15:00	Lexian Yang (Tsinghua University) Ultrafast Dynamics of Charge Orders in Quasi-one-dimensional Quantum Materials	
15:00-15:20	Yi Yang (The University of Hong Kong) Optical Parametric Free-electron-photon Quantum Interaction	
15:20-15:40	Shigeki Tokita (Kyoto University & National Institute for Fusion Science) Ultra-high Peak Power Mid-infrared Laser Systems and Their Prospects for Strong-field Physics	
15:40-16:00	Zhexin Zhao (Friedrich-Alexander-Universität Erlangen-Nürnberg) Control Free-electron-light Interaction for Nanophotonic Particle Accelerators and Quantum Applications	
Break (30 minutes)		
16:30-17:50	This time slot is reserved for the plenary session. Please refer to the plenary session schedule in Page 6.	
18:30-20:00	Dinner	

Parallel Session 4 (Day 5)
Ultrafast physics and technology

Morning, July 17, 2026

Yingtian Hall, 1st Floor

Time	Speaker & Talk Title	Chair
09:00-09:20	Jietai Jing (East China Normal University) Generation, Detection and Applications of Quantum Light Sources Based on Atomic Ensembles	Jian Wu (East China Normal University)
09:20-09:40	Zengxiu Zhao (National University of Defense Technology) Circular Dichroism of Attosecond Transient Absorption	
09:40-10:00	Hugo Laurell (Niels Bohr Institute, Copenhagen) Attosecond Transient Absorption Spectroscopy of Photovoltaics	
Break (30 minutes)		
10:30-10:50	Shuyun Zhou (Tsinghua University) Floquet Engineering of Quantum Materials: from Semiconducting Black Phosphorus to Graphene	Zengxiu Zhao (National University of Defense Technology)
10:50-11:10	Chen Hu (The Chinese University of Hong Kong) Light-induced Exciton Physics in 2D Materials	
11:10-11:30	Jingdi Zhang (Hong Kong University of Science and Technology) Ultrafast Light-matter Interaction: from Transition Metal Oxides to van der Waals Materials	
11:30-11:50	Changhua Bao (University of Regensburg, Germany) Lightwave-driven Flat Bands in a van der Waals Crystal	
11:50-14:00	Lunch (Yanming Hall, 1 st Floor)	

Afternoon, July 17, 2026

Yingtian Hall, 1st Floor

Time	Speaker & Talk Title	Chair
14:00-14:20	Marcelo Fabián Ciappina (Guangdong Technion-Israel Institute of Technology) Vortex-driven High-order Harmonic Generation in Gases and Solids	Liangyou Peng (Peking University)
14:20-14:40	Sizuo Luo (Institute of Atomic and Molecular Physics, Jilin University) Phase Matching of Quantum HHG: A Crucial Step Towards Attosecond Quantum Spectroscopy	
14:40-15:00	Tran Trung Luu (The University of Hong Kong) Strong-field Dynamics Probed by Noncollinear High Harmonic Spectroscopy	
15:00-15:20	Zhong Yin (Tohoku University) Tracking Photoinduced Chemical Dynamics with Soft X-ray Spectroscopy	
15:20-15:40	Yu Zhang (Rutherford Appleton Laboratory) 100 kHz Repetition Rate Extreme Ultraviolet Beamlines at the Artemis Facility	
Break (30 minutes)		
16:10-16:30	Liangyou Peng (Peking University) Generation of Structured High Harmonics from Solids	Marcelo Fabián Ciappina (Guangdong Technion-Israel Institute of Technology)
16:30-16:50	Yujia Yang (Shenzhen International Quantum Institute) Free-electron-photon Interactions with Photonic Integrated Circuits	
16:50-17:10	Jie Feng (National University of Defense Technology) Laser Plasma Accelerating Ultra-short Ultra-intense Electron Beam for Nuclear Applications	
17:10-17:30	Yanfei Li (Xi'an Jiaotong University) The First Experimental Measurement of Gamma-ray Polarization from All-optical Nonlinear Compton Scattering	
17:30-17:50	Runze Li (ShanghaiTech University) A Tabletop Ultrafast Hard X-ray Source Driven by Laser Plasma Interactions for Time-resolved Diffraction Studies	
17:50-18:10	David Busto (Lund University, Sweden) Ultrafast Photoelectron Interferometry with Polychromatic Laser Fields	
18:10-20:00	Dinner (Yanming Hall, 1 st Floor)	

Parallel Session 4 (Day 6)
Ultrafast physics and technology

Morning, July 18, 2026

Yingtian Hall, 1st Floor

Time	Speaker & Talk Title	Chair
09:00-09:20	Zhedong Zhang (City University of Hong Kong) Quantum-enhanced Spectroscopy of Nonadiabatic Electron Dynamics with Correlated Photons	BinBin Zhou (Technical University of Denmark)
09:20-09:40	Jonathan Dubois (Laboratoire de Chimie Physique Matière et Rayonnement) Quantum Optical Interferometric Photoemission	
09:40-10:00	Jaismeen Kaur (Université Paris-Saclay) Sub-cycle Relativistic Lightwave Electronics	
Break (30 minutes)		
10:30-10:50	BinBin Zhou (Technical University of Denmark) Ultra-broadband Terahertz Generation via Strongly Phase-mismatched Optical Rectification	Zhedong Zhang (City University of Hong Kong)
10:50-11:10	Liwei Song (Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences) Strong-field Ultrafast Dynamics in the Terahertz Regime	
11:10-11:30	Xinyao Zhang (Institute of Physics, Chinese Academy of Sciences) Strong-field THz Physics: from THz Sources to Control Over Matter	
11:30-11:50	Long Cheng (Technical University of Denmark) Charge-transfer Excitation Enables Ultrafast Exciton Self-trapping in NiPS ₃	
11:50-14:00	Lunch (Yanming Hall, 1 st Floor)	

Parallel Session 5 (Day 4)

High-pressure and high temperature large-volume press techniques and applications

Afternoon, July 16, 2026

Culai Hall, 1st Floor

Time	Speaker & Talk Title	Chair
14:00-14:20	Takafumi Yamamoto (Kyoto University) High-pressure Synthesis of Perovskite Oxyhydrides: Strategic Control of the Composition and Anion Ordering	Zhaodong Liu (Jilin University)
14:20-14:40	Lidong Dai (Guizhou Normal University) Acoustic Shock Wave-induced Structural Phase Transition of Carbon Nano Structures: Tetrahedral Amorphous Carbon, Graphite and Graphene	
14:40-15:00	Kuo Li (Center for High Pressure Science & Technology Advanced Research) High-pressure Synthesis of Sheathed Single Metal Atom Chain	
15:00-15:20	Dmitrii Semenov (The Center for High Pressure Science & Technology Advanced Research) Ultrastable Metal Polyhydrides Below 60 GPa	Lianjie Man (ETH Zurich)
15:20-15:40	Soonjae Moon (Hanyang University) Optical Observation of Flat Band Charge Dynamics in Kagome Metal CsCr6Sb6	
15:40-16:00	Yujie Wang (Inner Mongolia University) Pore-wall Microenvironment Engineering in Crystalline Organic Catalysts	
Break (30 minutes)		
16:30-17:50	This time slot is reserved for the plenary session. Please refer to the plenary session schedule in Page 6.	
18:30-20:00	Dinner	

Parallel Session 5 (Day 5)

High-pressure and high temperature large-volume press techniques and applications

Morning, July 17, 2026

Culai Hall, 1st Floor

Time	Speaker & Talk Title	Chair
09:00-09:20	Lianjie Man (ETH Zurich) Integrating High-pressure Experiments on Iron-rich Liquids to Constrain the Composition and Evolution of Planetary Cores	Shengcai Zhu (Shenzhen Campus of Sun Yat-sen University)
09:20-09:40	Yu Wang (Goethe University Frankfurt) The Fate of Sulfate during Subduction: High-pressure Stability and Redox Reactions in Deep Sulfur Cycling	
09:40-09:55	Dezhong Meng (China University of Geosciences) New Interfacial Phases of Polycrystalline Diamond Under HPHT: Formation and Properties	
09:55-10:15	Nao Cai (University of Chinese Academy of Sciences) Thermal elasticity of δ -AlOOH	
10:15-10:30	Xinyi Yang (Jilin University) Pressure-induced Emission based on the SECUF	
Break (15 minutes)		
10:45-11:05	Shengcai Zhu (Shenzhen Campus of Sun Yat-sen University) The Phase Transition Selectivity of Graphite under High Pressure	Longjian Xie (Center for High Pressure Science & Technology Advanced Research)
11:05-11:25	Haiyan Zheng (Center for High Pressure Science & Technology Advanced Research) Synthesis of Carbon Materials under High Pressure and Studying its Local Structure by Using ssNMR	
11:25-11:45	Xiang Li (European Synchrotron Radiation Facility) Spin-crossover-driven Charge Ordering Transition in Fe_4O_5	
11:45-12:00	Guoliang Niu (Center for High Pressure Science & Technology Advanced Research) Progress in Multi-anvil Press Technology: Stability, Expansiveness and Flexibility	
12:00-12:15	Zhaodong Liu (Jilin University) In-advanced High-pressure and High-temperature Large-volume Press User Facility and Applications in Multiple Applications	
12:15-14:00	Lunch (Yanming Hall, 1 st Floor)	

Afternoon, July 17, 2026

Culai Hall, 1st Floor

Time	Speaker & Talk Title	Chair
14:00-14:20	Jian Su (Nanjing University of Science and Technology) Dynamic Luminescent Metal-organic Frameworks	Qiang Tao (Jilin University)
14:20-14:40	Longjian Xie (Center for High Pressure Science & Technology Advanced Research) TiC-based Composites as Refractory Electrodes and Heaters in Large-volume Press	
14:40-15:00	Feng Zhu (China University of Geosciences) Phase Relations of Multicomponent Fe-light Element Melts and Implications for Planetary Core Dynamos	
15:00-15:20	Man Xu (Shanghai Advanced Research in Physical Sciences) Plastic Faulting in Deforming Natural Lherzolite Revealed by In-situ High-pressure and High-temperature Deformation Experiments Coupled with Acoustic Emission Monitoring	Xiang Li (European Synchrotron Radiation Facility)
15:20-15:40	Qiang Tao (Jilin University) Fabrication of Superhard Conductive Nanopolycrystalline Diamond Composite under High Pressure and High Temperature	
15:40-15:55	Yue Pan (Jilin University) Synthesis of Ultrahard Paracrystalline Diamond under Industrially Accessible Pressure Conditions	
Break (15 minutes)		
16:10-16:30	Shangsheng Li (Henan Polytechnic University) The Synthesis and NV Color Center Control of Diamond Co-doped with Nitrogen and Sulfur under HPHT	Man Xu (Shanghai Advanced Research in Physical Sciences)
16:30-16:50	Kai Zhang (Center for High Pressure Science & Technology Advanced Research) Topology-controlled Amorphous Allotropy in Elemental Phosphorus	
16:50-17:05	Bingtao Feng (Jilin University) Finite-element Study on the Generation of Ultrahigh-temperature and High-pressure Conditions in Large-volume Presses	
17:05-17:20	Shiyin Li (Center for High Pressure Science & Technology Advanced Research) Ca-doped Lanthanum Chromite as a Heating Element in Large Volume Presses	

17:20-17:45	Shucheng Liu (Jilin University) Toughening of Silicon Nitride Ceramics through Stress-induced Phase Transformation	
17:45-20:00	Dinner (Yanming Hall, 1 st Floor)	