

About this Meeting:

The Physical Review Workshop is a high-end academic event series initiated by the American Physical Society, dedicated to gathering top global experts in condensed matter, quantum materials and related frontier fields for in-depth academic exchanges and frontier research discussions.

The series has successfully held two authoritative sessions in mainland China before. The first was hosted in 2019, focusing on new frontiers of superconductivity; the second took place in 2021, centering on quantum materials, magnetism and spintronics. Both sessions have built a solid academic reputation, promoted interdisciplinary collaboration, and effectively strengthened academic links between Chinese and international researchers.

Continuing the high-standard tradition of the series, this upcoming workshop will be jointly held by the American Physical Society, the University of Hong Kong, and the Guangdong-Hong Kong-Macao Greater Bay Area Quantum Science Center in Hong Kong in early June this year. It will focus on Optical Quantum Materials, aiming to inherit the series' academic positioning and further expand international academic cooperation in the Greater Bay Area.

Conference Chair:

Prof. Ferenc Krausz	Max Planck Institute of Quantum Optics
Prof. Qikun Xue (薛其坤)	Southern University of Science and Technology
Prof. Xiang Zhang (张翔)	The University of Hong Kong

Scientific Program Committee:

Prof. Yuri Kivshar	Australian National University
Prof. John Pendry	Imperial College London
Prof. Shining Zhu (祝世宁)	Nanjing University

Local Organizing Committee:

Shuang Zhang (张霜)	The University of Hong Kong
Wang Yao (姚望)	The University of Hong Kong
Tran Trung Luu	The University of Hong Kong
Zidan Wang (汪子丹)	Guangdong Hong Kong Macao Greater Bay Area Quantum Science Center
Junjie Li (李俊杰)	American Physical Society (APS)

Topic:

1. Cavity vacuum control & Cavity QED
2. Ultra-fast and strong light
3. Light-matter interaction in 2D quantum materials
4. Metamaterials and nanophotonics

Invited Speaker:

Junjie Li	American Physical Society
Shiwei Wu	Fudan University
Qinghai Song	Harbin Institute of Technology, Shenzhen
Tiejun Cui	Northeastern University
Renmin Ma	Peking University
Yunfeng Xiao	Peking University
Yoshi Iwasa	RIKEN
Guixin Li	Southern University of Science and Technology
Qidong Jiang	Shanghai Jiao Tong University
Jin Liu	Sun Yat-sen University
Qihua Xiong	Tsinghua University

Date:

Monday, June 1, 2026

Venue:

CYPP2, LG1, Chong Yuet Ming Physics Building, HKU

Program:

Time	Title	Name	Affiliation	Host
09:20-09:30	Opening remarks	Shuang Zhang	The University of Hong Kong	Wang Yao (The University of Hong Kong)
09:30-10:00	Programmable Space-time holograms and skyrmions	Tiejun Cui	Southeast University	
10:00-10:30	Narwhal wavefunctions and the quest for ultimate light localization	Renmin Ma	Peking University	
10:30-10:45	Refreshment			

10:45-11:15	Nonlinear physics in ultrahigh-Q optical microcavity	Yunfeng Xiao	Peking University	Shuang Zhang (The University of Hong Kong)
11:15-11:45	Semiconductor Cavity Quantum Electrodynamics	Jin Liu	Sun Yat-sen University	
11:45-12:15	Virtual Photons, Real Effects: The Rise of Vacuumronics	Qingdong Jiang	Shanghai Jiao Tong University	
12:15-14:00	Lunch (Invited only)			
14:00-14:30	Quantum Geometric photocurrent in 2D materials	Yoshi Iwasa	RIKEN	Sen Yang (The Hong Kong University of Science and Technology)
14:30-15:00	Manipulating exciton polariton condensates and their ultrafast dynamics at room temperature	Qihua Xiong	Tsinghua University	
15:00-15:30	Nonlinear magneto-optics in 2D magnets	Shiwei Wu	Fudan University	
15:30-15:45	Refreshment			
15:45-16:15	Physical Review Journals: advancing physics and serving physicists	Junjie Li	APS	Zidan Wang (Quantum Science Center)
16:15-16:45	Nonlinear Rotational Doppler Effect on Spinning Metasurfaces	Guixin Li	Southern University of Science and Technology	
16:45-17:15	Metalasers with arbitrary wave front	Qinghai Song	Harbin Institute of Technology, Shenzhen	
17:15-17:30	Closing remarks	Wang Yao	The University of Hong Kong	
17:30-20:00	Banquet (Invited only)			

Enquiry:

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