COME 2025

THE 7TH COMPUTATIONAL OPTICAL MEASUREMENT AND ITS EDUCATION

第七届计算光学测量及其教育国际研讨会

June 27 - 29 , 2025 • Shanghai , China

PROGRAM BOOK

会议手册

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About the Conference

Computational Optical Measurement, as a cross-discipline, combining knowledge and techniques from the fields of optics, computer science and engineering, aims to realize high-precision and high-efficiency optical measurements using computational methods. The forum focuses on the in-depth integration of cutting-edge research and postgraduate education, involving research fields including but not limited to optical measurement, optical testing, experimental mechanics, three-dimensional imaging, computational optics, optical instrumentation, artificial intelligence, etc.

To promote academic exchanges and cooperation, technological progress and application innovation, and to provide a platform for young scholars to communicate, scholars in this field have advocated and initiated the International Forum on Computational Optical Measurement and its Education in 2019. The 7th International Forum on Computational Optical Measurement and its Education (COME2025) will be organized by Shanghai University and held from June 27 to June 29, 2025 in Shanghai, China. This forum has invited eight well-known experts in related fields to share their academic achievements and experiences. And a student presentation competition is held to provide a platform for research students to exchange ideas and learn from each other, where 2 Grand Prizes, 4 First Prizes, and 6 Second Prizes will be awarded for Oral Presentations.

Welcome you to this global forum to share your ideas and experiences, enjoy the company of new and old friends.

Conference Chairs

Prof. Yingjie Yu
Shanghai University

Associate Prof. Kemao Qian
Nanyang Technological University

Organized By

上海大学 Shanghai University

NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE

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ACKNOWLEDGEMENT

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Ying Luo	Yicheng Sun	Shen Liu	Changyang Huang
Qiwei Fang	Xulong Zhuang	Yun Chen	Wangjie Lai
Yiqin Tao	Yang Tang	Ying Guan	Yonghao Zhou

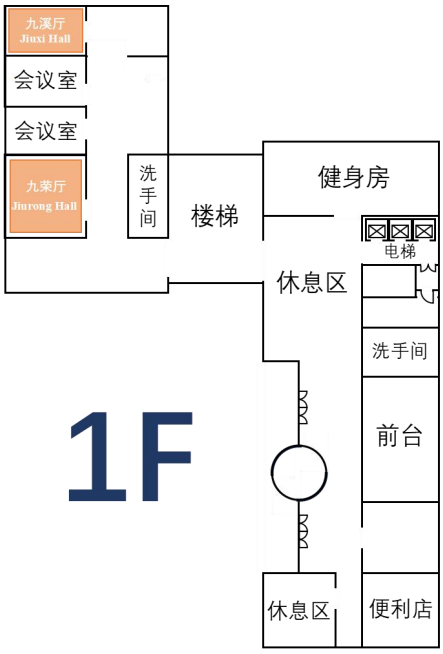
Conference Venue

Novotel Shanghai Baoshan Jiusi Hotel

Address: No. 8, Lane 377 Shanlian Road, Baoshan District, Shanghai, China

Venue Info:

Level	Meeting Room	June 27th	June 28th
1F	Jiuxi Hall	◆	
1F	Jiurong Hall	◆	
2F	Jiusi Hall		◆



TRANSPORTATION

From Shanghai Hongqiao International Airport

By Taxi	Approx. 15 minutes by car/drive, distance approx. 17.3 km
By Metro-Bus	About 1 hour and 30 minutes; Take Metro **Line 2 (towards Pudong Terminal 1 and 2)**, ride for **4** stops and get off at **Loushanguan Road station**. At Loushanguan Road station, transfer to Metro **Line 15 (towards Gucun Park)**, ride for **11** stops and exit from **Exit 3** at **Jinqiu Road station**. Then walk about 321 meters, approximately 5 minutes, to **Qilian Second Village**. From there, take **Bus No. 85 (towards Baoqi Road Yuantai Road)**, ride for **5** stops and get off at **Yuanxin Road Fengxiang Road**. Finally, walk about 390 meters, approximately 6 minutes, to arrive at Shanghai Jiusi Hotel.

From Shanghai Pudong International Airport

By Taxi	Approx. 60 minutes by car/drive, distance approx. 62.6 km
By Metro-Bus	About 2 hours and 26 minutes: Take Metro **Line 2 (towards National Exhibition and Convention Center)**, ride for **20** stops and get off at **Jing' an Temple station**. At Jing' an Temple station, transfer to Metro **Line 7 (towards Meilan Lake)**, ride for **12** stops and exit from **Exit 3** at **Shanghai University station**. Then walk about 385 meters, approximately 6 minutes, to **Shanghai University (Jinqiu Road)**. From there, take **Bus No. 85 (towards Baoqi Road Yuantai Road)**, ride for **6** stops and get off at **Yuanxin Road Fengxiang Road**. Finally, walk about 390 meters, approximately 6 minutes, to arrive at Shanghai Jiusi Hotel.

From Shanghai Hongqiao Railway Station

By Taxi	Approx. 30 minutes by car/drive, distance approx. 20.0 km
By Metro-Bus	About 1 hour and 29 minutes: Take Metro **Line 2 (towards Pudong Terminal 1 and 2)**, ride for **5** stops and get off at **Loushanguan Road station**. At Loushanguan Road station, transfer to Metro **Line 15 (towards Gucun Park)**, ride for **11** stops and exit from **Exit 3** at **Jinqiu Road station**. Then walk about 321 meters, approximately 5 minutes, to **Qilian Second Village**. From there, take **Bus No. 85 (towards Baoqi Garden Yuantai Road)**, ride for **5** stops and get off at **Yuanxin Road Fengxiang Road**. Finally, walk about 390 meters, approximately 6 minutes, to arrive at Shanghai Jiusi Hotel.

From Shanghainan Railway Station

By Taxi	Approx. 42 minutes by car/drive, distance approx. 29.5 km
By Metro-Bus	About 1 hour and 16 minutes: Take Metro **Line 15 (towards Gucun Park)** from Shanghai South Station, ride for **17** stops and get off at **Jinqiu Road Station (Exit 3)**. Then walk about 321 meters, approximately 5 minutes, to **Qilian Second Village**. From there, take **Bus No. 85 (towards Baoqi Road Yuantai Road)**, ride for **5** stops and get off at **Yuanxin Road Fengxiang Road**. Finally, walk about 390 meters, approximately 6 minutes, to arrive at Shanghai Baoshan Jiusi Hotel.

From Shanghai Railway Station

By Taxi	Approx. 41 minutes by car/drive, distance approx. 16.0 km
By Metro-Bus	About 1 hour and 26 minutes: Walk to **Hengfeng Road and Tianmu West Road**, then take **Bus No. 185 (towards Yuankang Road Shitai Road)** at the **Hengfeng Road Tianmu West Road stop**. Ride for **23** stops and get off at **Shitai Road Zhenchen Road**. After getting off, walk about 1.2 kilometers, approximately 18 minutes, to reach Shanghai Baoshan Jiusi Hotel.

AGENDA OVERVIEW

Sign-in	**6/27 10:00-18:00**
	6/28 08:00-10:00

Day1 | June 27, 2025

Time	Activity	Chair & Venue
14:00-17:10	**Student Competition-I**	Chair: **Huiling Zhang, Yang Tang** Shanghai University Jiuxi Hall(1F)
		Chair: **Anqi Li, Bin Shen** Shanghai University Jiuxi Hall(1F)
	Student Competition-II	Chair: **Ying Luo, Tengfei Zhang** Shanghai University Jiurong Hall(1F)
		Chair: **Shuyu Jia, Peng Chen** Shanghai University Jiurong Hall(1F)

Day2 | June 28, 2025

Time	Activity	Speaker	Chair
08:40-08:45	Welcome Address	**Yingjie Yu**	Zhizheng Wu Shanghai University Jiusi Hall(2F)
08:45-08:50		**Kemao Qian**	
08:50-08:55	Introduction to the Conference	**Chao Zuo**	
08:55-09:00	Group Photo		

Day2 | June 28, 2025

Time	Activity	Speaker	Chair
09:00-09:40	Optical and Terahertz Methodologies and Instrumentation for Quantitative Non-destructive Evaluation of Surface and Interface of Thin-films	**Shuncong Zhong**	Hongyue Gao Shanghai University Jiusi Hall(2F)
09:40-10:20	Three Decades of OLED Innovation: Current Status and Future Prospects	**Junji Kido**	
10:20-10:40	Coffee Break		
10:40-11:20	Material Optics in the Digital Era: Bridging Research and Education	**Sergiy Valyukh**	Xinxing Xia Shanghai University Jiusi Hall(2F)
11:20-12:00	Development of Optical Analysis Equipment and Techniques Based on the Requirements of Cultural Relic Research	**An Gu**	
12:00-14:00	Lunch		
14:00-14:40	Solving Inverse Problems for Optical Transmission and Imaging through Complex Scattering Media	**Wen Chen**	Sergiy Valyukh Linköping University Jiusi Hall(2F)
14:40-15:20	Question-Driven Academic Research: My Journey on Optic Measurement	**Huaxia Deng**	
15:20-15:40	Coffee Break		
15:40-16:20	Two Applications of Computer Generated Holograms	**Daping Chu**	Shunqi Zhang Shanghai University Jiusi Hall(2F)
16:20-17:00	The Development Trend of AI: From Scaling to Agentic Super Intelligence	**Dacheng Tao**	
Awards and Closing Ceremony			
17:00-17:20	Awards Ceremony		Wenjing Zhou Shanghai University Jiusi Hall(2F)
17:20-17:25	COME2026 Announcement		
17:25-17:30	COME2025 Summary, Closing		

Day3 | June 29, 2025

Technical exchanges & laboratory visits

KEYNOTE SPEAKERS

Daping Chu

Professor of Permanent Chair at the University of Cambridge.
Director of the Cambridge Centre for Optical Devices and Sensors.

Daping Chu is a tenured Chair Professor of Technology and Innovation at the University of Cambridge, Director of Cambridge Center for Photonic Devices and Sensors (CPDS). His current research areas include spatial light modulators and modulation technology, image and digital information processing, holographic technology, naked-eye 3D display, head-mounted and head-up displays (HMDs and HUDs), all-optical network optical communication switches, digital lighting, flexible printed electronics, and laminated high-brightness multi-stable reflective display devices and manufacturing.

Speech Title

Two Applications of Computer Generated Holograms

Abstract: Computer generated holograms (CGHs) have the benefit of utilising data processing to manupulate waves through holograms and design and optimise reconstructed optical image in real space. Two examples of recent applications are given. Firstly, a merit function that integrates energy redistribution into the Gerchberg-Saxton (GS) method is introduced for enhancing the contrast and increasing the dynamic range of reconstructed holographic images. Secondly, the use of a single phase-only CGH for white light digital holographic illumination is explored, with a focus on reducing color dispersion and improving perceived image quality.

KEYNOTE SPEAKERS

Wen Chen

Associate Professor at Department of Electrical and Electronic Engineering & Photonics Research Institute, The Hong Kong Polytechnic University, Hong Kong, China

Wen Chen received Ph.D. degree from National University of Singapore. Dr. Chen conducted extensive research related to computational optics and information photonics as Research Associate (2010) and Research Fellow (2011-2015) in National University of Singapore. Dr. Chen was a visiting scholar in Harvard University in 2013. Dr. Chen joined The Hong Kong Polytechnic University as an Assistant Professor in Dec. 2015. Since 1 July 2021, Dr. Chen is currently an Associate Professor in Department of Electrical and Electronic Engineering & Photonics Research Institute at The Hong Kong Polytechnic University. Dr. Chen has authored more than 180 journal and conference papers on his field of specialization. Dr. Chen is listed among the top 2% of the world' s most highly cited scientists by Stanford University. Dr. Chen serves as an Editor or Associate Editor for several academic journals (e.g., Optics and Lasers in Engineering (Elsevier), Optics Express (OPTICA Publishing Group)). Dr. Chen' s current research interests focus on computational optics, information photonics, optical imaging, optical encoding, free-space optical data transmission, deep learning in optics and photonics.

Speech Title

Solving Inverse Problems for Optical Transmission and Imaging through Complex Scattering Media

Abstract: Computational optics is the science and technology of light (photon) generation, illumination, manipulation, modulation, transmission and detection combined with computing platforms and advanced algorithms. Computational optics is focused on approaches, models and technologies for sensing, measurement, interpretation and visualization of information, and is widely studied and applied in recent years, e.g., consumer electronics, photonic computing, intelligent computation, human-computer interaction, computational microscopy, computed tomography, and biological imaging. In this invited Keynote Talk, Prof. Chen will present his current research work about inverse problems in wave propagation through complex media. This Keynote talk will focus particularly on the theories, characteristics and performance of computational optics with single-pixel detection. The applications, e.g., optical transmission and imaging through complex (highly dynamic) scattering media, are presented and discussed.

KEYNOTE SPEAKERS

Huaxia Deng

Professor at the University of Science and Technology of China

Huaxia Deng is a distinguished professor at the University of Science and Technology of China. He served as a postdoctoral researcher at the University of Liverpool (UK) and professor at Hefei University of Technology. Recognized with honors like the Duncan Norman Research Scholarship, Anhui Natural Science Foundation Outstanding Youth Fund, and Chinese Academy of Sciences High-Level Talent Program, he leads research on dynamic system testing, control, and applications aligned with national priorities. His work spans aerospace, high-speed trains, and semiconductor testing, yielding original breakthroughs. He has directed multiple National Natural Science Foundation projects (1 Youth Fund, 3 General Programs), an overseas collaboration, and a sub-project under the Ministry of Science and Technology' s major instrument program. He holds editorial roles in Experimental Mechanics and Frontiers in Materials, and serves as director of the Anhui Vibration Engineering Association.

Speech Title

Question-Driven Academic Research: My Journey on Optic Measurement

Abstract: This research chronicles my shift from mechanical vibration analysis to optical measurement for extreme environments. Driven by the need for non-contact vibration measurement in jet engines (900 °C+, complex vibrations), we overcame conventional limitations through three innovation cycles:

(1) Speed: Developed 2.5D calibration and hybrid fringe projection for single-frame 3D reconstruction.

(2) Accuracy: Established error models and dynamic calibration methods.

(3) Robustness: Created single-pixel imaging and bio-inspired algorithms, maintaining 92% accuracy at 900°C.

The key breakthrough is Fourier-domain single-pixel tracking, using 0.01% of traditional data to achieve 50nm precision in microfluidics. Modal learning via machine learning also reconstructed full-field stresses from sparse points.

These solutions redefine optical measurement as computational inverse problems, outperforming existing techniques in aerospace, energy, and biomedical applications. This journal exemplifies how question-driven iteration bridges disciplines to solve intractable measurement challenges.

KEYNOTE SPEAKERS

An Gu

Research Fellow and Deputy Director of the Department of Conservation Science, The Palace Museum

An Gu graduated from the School of Materials Science and Engineering, Beihang University. Currently, he is a Research Fellow and Deputy Director of the Department of Conservation Science at the Palace Museum. He has long focused on preventive conservation of cultural relics and scientific analysis of organic materials, applying scientific methods to solve complex challenges. His research emphasizes applied technologies for minimally invasive, high-sensitivity/high-resolution analysis, including near-infrared spectroscopy with chemometrics, Py-GC-MS, and LC-MS. He independently developed innovative instruments like high-resolution digital microscopes and portable fiber-optic EEM systems, enabling precise material identification of cultural relics (e.g., paintings, textiles, lacquerware). In recent years, he has led National Key R&D Program projects, published over 20 papers.

Speech Title

Development of Optical Analysis Equipment and Techniques Based on the Requirements of Cultural Relic Research

Abstract: Cultural relics are precious carriers of human civilization, embodying historical, artistic, and scientific value. Modern scientific analysis of relic materials and craftsmanship reveals crucial insights, benefiting historical research, heritage conservation, traditional craft revival, and public cultural confidence.

Given the complexity, preciousness, and non-renewability of relics, analytical techniques must meet strict requirements like non-destructiveness, in-situ analysis, high sensitivity, and resolution—challenges conventional equipment often fails to address.

To tackle these, we developed specialized analytical tools: large-field high-resolution in-situ microscopes, portable micro-area EEM systems, large-format hyperspectral scanners, near-infrared spectroscopy with chemometrics, and SERS. These have successfully addressed key analytical challenges in scientific studies of calligraphy, paintings, textiles, lacquerware, and other relics.

KEYNOTE SPEAKERS

Junji Kido

Professor at Yamagata University, Japan.
Inventor of white OLED.
Global promoter of OLED industrialization.

Junji Kido has received his Ph. D. degree in polymer chemistry from Polytechnic University. In 1989, he joined the department of polymer chemistry at Yamagata University in Japan as an assistant professor and promoted to an associate professor in 1995, to a full professor in 2002, and to a distinguished research professor in 2011. He was appointed as the General Director for" Research Institute for Organic Electronics" founded by the Yamagata prefectural government from 2003 to 2010. His current research activities are focused on organic light-emitting devices (OLEDs). He invented white-light-emitting OLEDs in 1993 for the first time and continuously working on developing high performance OLEDs. Wall Street Journal (May 10, 1995) cited his work entitled "Japanese Light Researcher May Turn LED into Gold" .He is a co-founder of "Lumiotec Inc." to manufacture white OLED panels for general lighting applications.In 2015, he received the Karl Ferdinand Braun Award from Society for Information Display, USA, and the Award from the Chemical Society of Japan in 2021.

Speech Title

Three Decades of OLED Innovation: Current Status and Future Prospects

Abstract: Since the first report of a multilayer OLED by Tang and Van Slyke in 1987, we began our OLED research in Yamagata in 1989. Our initial work focused on a green-emitting OLED based on a terbium complex, which exhibited emission from a multiplet excited state. Subsequently, our efforts shifted to polymer-based OLEDs, leading to the development of white OLEDs. We also explored vacuum-deposited white OLEDs, which marked the beginning of our research into OLED lighting.Over the years, OLED performance has steadily improved. After the introduction of phosphorescent materials by Forrest and Thompson, following the use of fluorescent materials, the external quantum efficiency (EQE) of white OLEDs increased to 30–40 lm/W. In 2003, our group reported the first tandem OLEDs at SID. These tandem structures enabled both high luminance and long operational lifetime.In 2011, Lumiotec released the first commercial OLED lighting panels. Later, LG began mass-producing large OLED display panels using tandem white OLEDs combined with color filters. Today, a wide variety of OLED display products are available on the market.The next major challenge for OLED technology is reducing production costs. To address this, we have continued to focus on solution-processable OLEDs, aiming to realize a 120-inch wallpaper display. This presentation will discuss recent progress and future prospects in OLED research.

KEYNOTE SPEAKERS

Sergiy Valyukh

Senior Associate Professor at Linköping University, Sweden
Visiting Professor at Shanghai University

Sergiy Valyukh is a Senior Associate Professor at Linköping University, Sweden. He received his PhD in Optics and Laser Physics from Kyiv Taras Shevchenko University in 2003. His main professional interests include optical characterization and simulations of light interaction with complex structured media. He was the principal developer of several automated measurement systems—both research-grade and commercial—used for the characterization of flat panel displays and their components, as well as the determination of optical properties of bulk materials and surfaces. Since 2010, he has been conducting research at Linköping University. Since 2019, he has been a Visiting Professor at Shanghai University.

Speech Title

Material Optics in the Digital Era: Bridging Research and Education

Abstract: This presentation will cover the specifics of optical measurements conducted in the Laboratory of Spectroscopic Ellipsometry at Linköping University, supporting both scientific research and educational activities. The focus will be on high-precision measurements with spatial, spectral, and temporal resolution. In addition, student projects involving the development of various automated ellipsometers within the CDIO course framework will be discussed.

KEYNOTE SPEAKERS

Dacheng Tao

Distinguished Professor at Nanyang Technological University, Singapore

Dacheng Tao is currently a Distinguished University Professor in the College of Computing and Data Science at Nanyang Technological University. He mainly applies statistics and mathematics to artificial intelligence, and his research is detailed in one monograph and over 300 publications in prestigious journals and proceedings at leading conferences, with best paper awards, best student paper awards, and test-of-time awards. His publications have been cited over 150K times and he has an h-index 180+ in Google Scholar. He received the 2015 and 2020 Australian Eureka Prize, the 2018 IEEE ICDM Research Contributions Award, 2020 research super star by The Australian, the 2019 Diploma of The Polish Neural Network Society, and the 2021 IEEE Computer Society McCluskey Technical Achievement Award. He is a Fellow of the Australian Academy of Science, ACM and IEEE.

Speech Title

The Development Trend of AI: From Scali

Abstract: Artificial Intelligence has rapidly evolved from rule-based systems to today’ s generative models and now toward agent-based super intelligence with safety guarantee. Recent progress followed a trajectory: scaling during training, efficiency in inference, and the rise of autonomous agents capable of planning and interaction. These advances promise powerful new applications but also bring serious risks: adversarial attacks, hallucinations, privacy threats, and social disruption. As AI grows more capable, balancing innovation with safety becomes crucial. This talk explores AI’ s development journey, current challenges, and the future path, highlighting the need for not only more powerful systems, but also more responsible, human-aligned AI that can act as a trusted partner in shaping tomorrow’ s world.

KEYNOTE SPEAKERS

Shuncong Zhong

Chair Professor at Fuzhou University
Founder and Director, Fujian Provincial Key Laboratory of Terahertz Functional Devices and Intelligent Sensing

Shuncong Zhong obtained his PhD from The University of Manchester, UK, in 2007. He has extensive industrial and academic experience at Mindray Co., Ltd, Imperial College London, University of Liverpool, University of Strathclyde, Shanghai Jiaotong University, and Fuzhou University. Currently, he serves as a Chair Professor in Mechanical Engineering at Fuzhou University's School of Mechanical Engineering and Automation. His research focuses on optical & terahertz instrumentations, non-destructive testing, structural health monitoring, machinery condition monitoring, intelligent sensing, signal/image processing, and pattern recognition for diagnostics. He holds over 100 Chinese, US, and UK patents, has published 4 book chapters, 1 ISO standard, and 300+ journal papers (cited ~5000 times on Google Scholar) in journals like Nanophotonics, Nanoscale, and IEEE Trans. He was elected Fellow of the IET, International Society for Condition Monitoring, and The International Institute of Acoustics and Vibration in 2018, 2020, and 2022, respectively.

Speech Title

Optical and Terahertz Methodologies and Instrumentation for Quantitative Non-destructive Evaluation of Surface and Interface of Thin-films

Abstract: Surface and interface films are vital in aerospace materials, semiconductors, biomedical, and industrial coatings. Terahertz pulsed imaging and broadband optical interferometry are two emerging quantitative NDT techniques for thin film surfaces/interfaces. Terahertz research is thriving. This talk introduces typical terahertz devices, self-developed systems, broadband optical interferometers, and terahertz applications in engineering (e.g., NDT of thermal barrier and automotive coatings). It also presents measurement cases of broadband optical interferometers in advanced semiconductor packaging, wafer/epitaxial layer thickness, self-lubricating coatings, optical/biofilms, etc. Finally, by comparing optical, terahertz, and ultrasonic NDT methods, it demonstrates the importance and advantages of optical/terahertz technologies in quantitative evaluation of thin film surfaces/interfaces.

STUDENT COMPETITION-I

JUNE 27, 2025 | 14:00-17:10 | Jiuxi Hall | 1F

Student Chairs: **Huiling Zhang**, Shanghai University; **Yang Tang**, Shanghai University

Student Chairs: **Anqi Li**, Shanghai University; **Bin Shen**, Shanghai University

➢ TABLE OF TIME

Time	Speaker/Title	Chair
14:00-14:10	**Rui Li**, South China University Of Technology Title: Image feature guided self-adaptive subset configuration for digital image correlation	**Huiling Zhang** & **Yang Tang**
14:10-14:20	**Yaosen Deng**, Fuzhou University Title: Dynamic measurement method for ultrathin liquid film thickness	
14:20-14:30	**Ruiyang Liu**, Fudan University Title: Refraction-reflection dual-channel and multi-sensor fusion integrated deflectometric method for form-position measurement	
14:30-14:40	**Cui Huang**, Sichuan University Title: Differentiable scene-adaptive virtual lenses for achromatic extended depth imaging with a real lens	
14:40-14:50	**Han Tong**, Huaqiao University Title: Calibration of elliptical retarders in mueller matrix spectroscopic polarimetry and ellipsometry	
14:50-15:00	**Lianhao Zhang**, University of Science and Technology of China Title: Grating-free autofocus for single-pixel microscopic imaging	
15:00-15:10	**Mengyao Li**, Xi' an Technological University Title: Efficiency enhancements for frequency-shifting digital holographic microscopy using a sparse aperture	
15:10-15:20	**Runfan Liu**, Beihang University Title: A heat-resistant speckle fabrication method suitable for digital image correlation methods and its application	
15:20-15:40	Break	
15:40-15:50	**Xinyu Han**, Nanjing University of Science and Technology Title: DMD-based lightweight structured illumination super-resolution and optical sectioning microscopy imaging technology	
15:50-16:00	**Yuwei Wu**, Shanghai University Title: Towards high-speed wearable eye tracking system using single-pixel detector array for near-eye displays	

Time	Speaker/Title	Chair
16:00-16:10	**Yuchen Ma**, Tsinghua University Title: Cameras integrated with lightguides for ar applications	**Anqi Li** & **Bin Shen**
16:10-16:20	**Xinhao Huang**, Changzhou University Title: Two-step random phase-shifting interferometry based on unet	
16:20-16:30	**Zhangsheng Li**, Jiangxi University of Science and Technology Title: Dynamic measurement error elimination and uncertainty estimation for gear stripe projection based on deep learning and digital twin	
16:30-16:40	**Xinyue Ma**, Southeast University Title: Research on 3D Single-pixel Imaging	
16:40-16:50	**Qingyang Fu**, Nanjing University of Science and Technology Title: Compressive motionless optical scanning holography	
16:50-17:00	**Mingrui Huang**, Shanghai Jiao Tong University Title: High-temperature thermometry enabled by dispersive meta-lens	
17:00-17:10	**Yuhang Shen**, University of Shanghai for Science and Technology Title: Simulated grating for absolute measuring the transfer function of large-aperture fizeau interferometer	

STUDENT COMPETITION-II

JUNE 27, 2025 | 14:00-17:10 | Jiurong Hall | 1F

Student Chairs: **Ying Luo**, Shanghai University; **Tengfei Zhang**, Shanghai University

Student Chairs: **Shuyu Jia**, Shanghai University; **Peng Chen**, Shanghai University

➢ TABLE OF TIME

Time	Speaker/Title	Chair
14:00-14:10	**Chunyang Pei**, Zhejiang University Title: Design and fabrication of freeform liquid-crystal holographic optical elements	**Ying Luo** & **Tengfei Zhang**
14:10-14:20	**Haojia Jiang**, University of Science and Technology of China Title: Physics-informed and simulation-driven optimization for binary fourier single-pixel imaging	
14:20-14:30	**Feiya Ma**, Shaanxi Normal University Title: Systematical and universal calibration scheme for division-of-aperture polarimetric camera	
14:30-14:40	**Qi Qi**, Beihang University Title: Non-destructive measurement of residual stress in slender aeroengine inlet case support plates	
14:40-14:50	**Jiancheng Qiu**, Jiangxi University of Science and Technology Title: A DMD-based binary line scanning profilometry for high-robust 3D measurement of HDR objects	
14:50-15:00	**Qiankuan Tao**, Nanyang Technological University Title: Cloud registration with angle measurement and rotation axis estimation	
15:00-15:10	**Ying Yang**, University of Shanghai for Science and Technology Title: Surface profile measurement and parameters analysis of silicon wafer in the upright state	
15:10-15:20	**Jianhui Zhao**, Beihang University Title: Smart-DIC: towards automatic, robust and accurate shape and deformation measurement	
15:20-15:40	Break	
15:40-15:50	**Longkun Huo**, University of Chinese Academy of Sciences Title: Optimization strategies for suppressing instrumentation drift effects in measurements	
15:50-16:00	**Xingman Niu**, Fudan University Title: Monoscopic phase measuring deflectometry using beam imaging model	

Time	Speaker/Title	Chair
16:00-16:10	**Weizhi Jiang**, Changzhou University Title: Electronic speckle fringe denoising based on Noise2Noise	**Shuyu Jia** & **Peng Chen**
16:10-16:20	**Chengyi Shou**, Shanghai Jiao Tong University Title: Projection moiré based specular morphology measurement method	
16:20-16:30	**Yifan Liu**, Nanjing University of Science and Technology Title: Temporally super-resolved multi-frequency fringe multiplexing for structured light 3D imaging empowered by deep learning	
16:30-16:40	**Chen Wang**, Fudan University Title: Defect detection in optical materials based on time-averaged holography and photoelastic method	
16:40-16:50	**Qiwei Fang**, Shanghai University Title: Research on color computational holography algorithm based on physically enhanced neural network	
16:50-17:00	**Junjie Zhe**, Sichuan University Title: Information-efficient computational photoacoustic imaging with compressed acquisition and neural reconstruction	
17:00-17:10	**Yiqian Yang**, Tsinghua University Title: Quantum holography enhanced by object-uncorrelated photons	

COME 2025 7TH

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June 27-29，2025

Shanghai，China