



Programs

Time	Content
Friday, May 1, Hotel Club San Diego Registration, Lobby, 10:00-17:00 Welcome reception(voucher for entry), Sala degli Archi-the main wing of the hotel, 19:00	
Saturday, May 2, Local Government Conference Hall - Mara Congress (shuttle buses will be waiting at San Diego and Gabbiano Hotels and will depart from the two hotels to the conference venue at 8:20 AM)	
Opening Ceremony Chair: Jingze Yuan	
9:00-9:30	Remark 1: Pietro Ferraro (ISASI-CNR, Italy) Remark 2: Giulio Cerullo (Politecnico di Milano, Italy) Remark 3: Bo Chen (CIOMP, China) Remark 4: Yuhong Bai (Light Publishing Group, China) Remark 5: Liangcai Cao (Tsinghua University, China) Light: Science & Applications Editorial Board Appointment Ceremony
Sat, May 2 9:30-11:00	Topic 4: Optical Imaging and AI Integration Session 1 - Chair: Pietro Ferraro
9:30-10:00	Prof. Demetri Psaltis (EPFL, Switzerland) (Keynote) Title: Inverse scattering in non-Hermitian systems
10:00-10:20	Prof. David Brady (The University of Arizona, USA) (Invited) Title: Array Camera Design with Coherent Illumination
10:20-10:40	Prof. Maciej Trusiak (Warsaw University of Technology, Poland) (Invited) Title:Computational lensless holographic microscopy and tomography from deep-UV to near-IR on a standard sensor
10:40-11:00	Group Photo & Coffee break
Sat, May 2 11:00-12:30	Topic 4: Optical Imaging and AI Integration Session 2 - Chair: Liangcai Cao
11:00-11:30	Prof. Dieter Bimberg (CIOMP & TU Berlin, Germany) (Keynote) Title:Energy Efficient Multi Terabit Photonics: Quantum Dots at Work
11:30-11:50	Prof. Chao Zuo (Nanjing University of Science and Technology, China) (Invited) Title:Computational phase imaging for label-free 3D microscopy : noninterferometric phase retrieval and intensity diffraction tomography
11:50-12:10	Prof. Giuseppe Chirico (Milan Bicocca University, Italy) (Invited) Title:High resolution photo-thermal imaging for biological tissues
12:10-12:30	Prof. Pietro Ferraro (ISASI-CNR, Italy) (Invited) Title: Quantitative Coherent Imaging: A New Opportunity for In-Situ Water Quality Assessment
12:30-14:00	Lunch (voucher for entry) Ristorante Pizzeria La Torre (The shuttle will wait at the door)

Sat, May 2 14:00-15:30	Topic 4: Optical Imaging and AI Integration Session 3 - Chair: Maciej Trusiak
14:00-14:20	Prof. Liangcai Cao (Tsinghua University, China) (Invited) Title: Coherent and incoherent lensless imaging based on holography
14:20-14:40	Prof. Wenhao Li (CIOMP, China) (Invited) Title: Development and Application of Large-Scale and High-Precision Gratings
14:40-15:00	Prof. Linpeng Lu (Nanjing University of Science and Technology, China) (Invited) Title: PDL-TIQPI: A Physics-Unrolled Deep Learning Framework for Accurate Quantitative Phase Imaging under Partial Coherence
15:00-15:20	Prof. Vito Reno (STIIMA-CNR, Italy) (Invited) Title: Deep learning architectures for quality control via hyperspectral data processing: a case study of Vision Transformers for textile materials classification
15:20-15:30	Dr. Jinwen Wei (Tsinghua University, China) (Oral) Title: Computational Achromatic Imaging for Large-Scale Diffractive Lenses
<i>15:30-15:50</i>	<i>Coffee break</i>
Sat, May 2 15:50-17:30	Topic 2: Photonics in Medicine Session Chair: Liangyi Chen / Sara Coppola
15:50-16:10	Prof. Feng Pan (Beijing University of Aeronautics and Astronautics, China) (Invited) Title: Pose-Free 3D Quantitative Phase Imaging of Flowing Cellular Populations
16:10-16:30	Prof. Lisa Miccio (ISASI-CNR, Italy) (Invited) Title: BIO-Photovoltaic interface: all-optical and wireless handling of living cell through Lithium Niobate platform
16:30-16:50	Prof. Liangyi Chen (Peking University, China) (Invited) Title: Quantitative and holistic superresolution live-cell imaging: from structured illumination microscopy to the sparse deconvolution
16:50-17:10	Prof. Peng Zhang (Politecnico di Torino, Italy) (Invited) Title: Lighting up the Ambient Droplet Reactor: An Analytical Platform for Single-molecule Manipulations and Characterizations
17:10-17:30	Prof. Anna Grazia Mignani (National Research Council, Italy) (Invited) Title: Beyond the spectrometer: LED-driven near-infrared sensing for low-resource agri-food applications
<i>17:30-19:00</i>	<i>Social Event (voucher for entry) (shuttle buses will be waiting at the door and will depart at about 17:30pm)</i>



Time	Content
Sunday, May 3, Hotel Club San Diego Sala Orizzonte Room (<i>Parallel Venue A</i>) (shuttle buses will be waiting at Gabbiano Hotel and will depart to the conference venue at 8:30 AM)	
Sun, May 3 9:00-10:45	In Memoriam: Orazio Svelto – A Pioneer of Laser Science —Sala Orizzonte Room Chair: Sandro De Silvestri
9:00-9:15	Prof. Sandro De Silvestri (Politecnico di Milano, Italy) Title: Orazio Svelto: Scientist, Mentor, Pioneer
9:15-9:45	Prof. Mauro Nisoli (Politecnico di Milano, Italy) Title: Watching Electrons Move: Attosecond Methods for Molecular Physics
9:45-10:15	Prof. Roberto Osellam (CNR-IFN, Italy) Title: Femtosecond laser writing: an enabling tool for integrated photonic microsystems
10:15-10:45	Prof. Giulio Cerullo (Politecnico di Milano, Italy) Title: Real-time observation of conical intersection in biomolecules
10:45-11:10	<i>Coffee break</i>
Sun, May 3 11:10-13:10	Topic 5: Quantum Optics and Communication Session 1 - Sala Orizzonte Room - Chair: Zhiliang Yuan
11:10-11:40	Prof. Christoph Becher (Saarland University, Germany) (Keynote) Title: Highly indistinguishable single photons for quantum networks
11:40-12:00	Prof. Armando Rastelli (Johannes Kepler Universität Linz, Austria) (Invited) Title: Semiconductor Quantum Dots integrated in electrically-controlled nanophotonic structures as sources of entangled and indistinguishable photons
12:00-12:20	Prof. Fei Ding (Leibniz University Hannover, Germany) (Invited) Title: Towards long-distance quantum communication with deterministic single photon sources
12:20-12:40	Prof. Lizhong Yang (Nanjing University of Aeronautics and Astronautics, China) (Invited) Title: Low altitude economy and battery safety
12:40-13:00	Dr. Vittorio Bianco (ISASI-CNR, Italy) (Invited) Title: Adaptive line scanning holographic microscopy for optical metrology and bioimaging
13:00-13:10	Dr. Qiusuang Lian (Tsinghua University, China) (Oral) Title: Quantum-inspired super-resolution imaging for wide-linewidth objects
12:30-14:00	Lunch (voucher for entry) Sala degli Archi-the main wing of the hotel
Sun, May 3 14:00-16:00	Topic 5: Quantum Optics and Communication Session 2 - Sala Orizzonte Room - Chair: Armando Rastelli
14:00-14:20	Prof. Zhiliang Yuan (Beijing Academy of Quantum Information Sciences) (Invited) Title: A Spontaneous-Emission Model for Resonance Fluorescence

14:20-14:40	Prof. Gianluigi Zito (National Research Council, Italy) (Invited) Title:Dirac Polariton Condensation in Monolayer WS ₂ Enabled by Bound States in the Continuum
14:40-15:00	Prof. Daqing Wang (University of Bonn, Germany) (Invited) Title:New insights on molecular platforms for quantum science
15:00-15:20	Prof. Michele Rota (University of Rome La Sapienza, Italy) (Invited) Title:All-photonic entanglement swapping with remote quantum dots
15:20-15:40	Prof. Taira Giordani (Sapienza Università di Roma, Italy) (Invited) Title:Adaptive Boson Sampling for quantum machine learning
15:40-15:50	Dr. Xinyao Huang (Beihang University, China) (Oral) Title:Entanglement manipulation via non-Hermitian exceptional points
16:00-16:20	Coffee break
Sun, May 3 16:20-17:50	Topic 4: Optical Imaging and AI Integration Session 4 - Sala Orizzonte Room - Chair: Wenhao Li
16:20-16:40	Prof. Anna Archetti (University of Padova, Italy) (Invited) Title:Light at the nanoscale: Fluorophores and Photonics for Advanced Optical Imaging
16:40-17:00	Prof. Zdańkowski Piotr (Warsaw University of Technology, Poland) (Invited) Title:A unified 3D QPI platform enabled by single-shot polarization-grating shearing interferometry and incoherent illumination
17:00-17:20	Prof. Xiaojuan Sun (CIOMP, China) (Invited) Title: III-Nitride semiconductor based in-sensor computing devices
17:20-17:40	Prof. Shaojuan Li (CIOMP, China) (Invited) Title:Optoelectronic devices and heterogeneous integration based on low-dimensional materials
17:40-17:50	Dr. Yunhui Gao (Tsinghua University, China) (Oral) Title:Characterizing complex wavefields with a high-resolution computational wavefront sensor
19:00-21:00	Gala Dinner (voucher for entry) Sala degli Archi-the main wing of the hotel
Time	Content
Sunday, May 3, Hotel Club San Diego The Bar Lounge(Parallel Venue B) (shuttle buses will be waiting at Gabbiano Hotel and will depart to the conference venue at 8:30 AM)	
Sun, May 3 10:50-12:30	Topic 3: Astronomical and Dynamic Imaging Optics— The Bar Lounge Session Chair: Chen Tao
10:50-11:10	Prof. Zhipeng Huang (Dortmund University of Technology, Germany) (Invited) Title: Capture molecular movies with ultrafast photons and electrons: from isolated gas-phase to liquid- and solid-phase samples



11:10-11:30	Prof. Jianwei Sun (CIOMP, China) (Invited) Title: Thermal Plume–Induced Aero-Optic Distortions in High-Temperature Chamber Windows for Imaging and Measurement
11:30-11:50	Prof. Yutang Wang (CIOMP, China) (Invited) Title: Stabilization Control for High-Resolution Imaging in a Rigid-Flexible Coupled Platform
11:50-12:10	Prof. Cristian Manzoni (CNR, Italy) (Invited) Title: An ultrastable and portable interferometer for Fourier-transform spectroscopy and imaging in the thermal infrared
12:10-12:30	Prof. Chen Tao (CIOMP, China) (Invited) Title: Space X-EUV Optical Technology and Applications
<i>12:30-14:00</i>	<i>Lunch (voucher for entry)</i> <i>Sala degli Archi-the main wing of the hotel</i>
Sun, May 3 14:00-15:10	Topic 3: Astronomical and Dynamic Imaging Optics— The Bar Lounge Session Chair: Jianwei Sun
14:00-14:20	Prof. Sara Coppola (ISASI-CNR, Italy) (Invited) Title: Innovative fabrication techniques for micro optics and photonicstructures
14:20-14:40	Prof. Zhe Wang (University of Naples Federico II, Italy) (Invited) Title: Programmable formation of ultrathin polymer membranes enabledby digital holography
14:40-15:00	Prof. Hanyu Wang (CIOMP, China) (Invited) Title: Target detection in hyperspectral remote sensing imagery
15:00-15:10	Dr. Qifeng Li (Changchun UP Optotech Co., Ltd, China) (Oral) Title: Analysis of Coupled Degradation Mechanisms and Physically Consistent Joint Reconstruction for Spaceborne Pushbroom/TDI Full-Stokes Polarimetric Imaging
Sun, May 3 15:30 - 17:00	Tsinghua Connect: Networking Session for Optics and Photonics Talents— The Bar Lounge Session Chair: Liangcai Cao
<i>19:00-21:00</i>	<i>Gala Dinner (voucher for entry)</i> <i>Sala degli Archi-the main wing of the hotel</i>



Time	Content
Monday, May 4 Hotel Club San Diego—Sala Orizzonte Room (shuttle buses will be waiting at Gabbiano Hotel and will depart to the conference venue at 8:30 AM)	
Mon, May 4 9:00-10:50	Topic 1: Nonlinear and Ultrafast Photonics Session 1 - Sala Orizzonte Room - Chair: Zhigang Chen
9:00-9:30	Prof. Costantino De Angelis (University of Brescia, Italy) (Keynote) Title: Virtual metasurfaces for space and time image processing in a thin nonlinear film
9:30-9:50	Prof. Michele Celebrano (Polytechnic University of Milan, Italy) (Invited) Title: Modulation and routing of nonlinear optical signals with metasurfaces above GHz rates
9:50-10:10	Prof. Goery Gentry (Tampere University of Technology, Finland) (Invited) Title: TBD
10:10-10:30	Prof. Ming Yan (East China Normal University, China) (Invited) Title: Optical frequency comb spectroscopy and imaging
10:30-10:50	Prof. Marcello Ferrera (Heriot-Watt University, United Kingdom) (Invited) Title: Novel phenomena in low-index time-varying media
10:50-11:15	<i>Coffee break</i>
Mon, May 4 11:15-13:05	Topic 1: Nonlinear and Ultrafast Photonics Session 2 - Sala Orizzonte Room - Chair: Hrvoje Buljan
11:15-11:45	Prof. Stefan Wabnitz (Sapienza Università di Roma, Italy) (Keynote) Title: Spatiotemporal mode-locking transitions in a multimode fiber laser
11:45-12:05	Prof. Eugenio Del Re (University of Rome La Sapienza, Italy) (Invited) Title: Solitons and topology: from optical soliton pseudovorticity to photonics in topological ferroelectric soliton lattices
12:05-12:25	Prof. Giuseppe Leo (Université Paris Cité & CNRS, France) (Invited) Title: Harmonic light structuring with nonlinear metasurfaces
12:25-12:45	Prof. Monica Bollani (Polytechnic University of Milan, Italy) (Invited) Title: Nanofabrication and Process Optimization of High-Q Dielectric Metasurfaces for quasi-BIC Resonances
12:45-13:05	Prof. Dawei Wang (Zhejiang University, China) (Invited) Title: Realizing the Haldane Model in Room-Temperature Atoms
12:30-14:00	<i>Lunch (voucher for entry)</i> <i>Sala degli Archi-the main wing of the hotel</i>
Mon, May 4 14:00-15:50	Topic 1: Nonlinear and Ultrafast Photonics Session 3 - Sala Orizzonte Room - Chair: Monica Bollani
14:00-14:20	Prof. Dario Pisignano (University of Pisa, Italy) (Invited) Title: Light-Controlled Photonic Systems by Photoresponsive Materials and Additive Manufacturing
14:20-14:40	Prof. Vito Mocella (ISASI-CNR, Italy) (Invited) Title: Broadband BICs in Photonic Crystal Slabs



14:40-15:00	Prof. Stefano Luigi Oscurato (University of Naples Federico II, Italy) (Invited) Title: All-optical surface morphing of azomaterials with multiple light degrees of freedom
15:00-15:20	Prof. Marcella Salvatore (University of Naples Federico II, Italy) (Invited) Title: Real-Time Optical Metrology and Enhanced Inscription of Azomaterial Surface Relief Gratings
15:20-15:40	Prof. Hao Tian (Harbin Institute of Technology) (Invited) Title: New types of ferroelectric crystals and photoelectric functional devices
15: 40-16:00	Coffee break
Mon, May 4 16:00-18:30	Topic 1: Nonlinear and Ultrafast Photonics Session 4 - Sala Orizzonte Room - Chair: Eugenio DelRe
16:00-16:20	Prof. Heping Zeng (East China Normal University, China) (Invited) Title: Ultrafast breather lasers and fractal routes to chaos
16:20-16:40	Prof. Mario Ferraro (Università della Calabria, Italy) (Invited) Title: Beam cleaning and wave thermalization in optical fibers
16:40-17:00	Prof. Zihui Wu (Southern University of Science and Technology, China) (Invited) Title: The role of non-Hermiticity in Optical Trapping and Binding
17:00-17:20	Prof. Pengfei Wang (Northeast Normal University, China) (Invited) Title: Mid-infrared soliton generation, amplification and wavelength tuning in fluoride and fluorotellurite fibres
17:20-17:40	Prof. Neven Šantić (University of Zagreb, Croatia) (Invited) Title: Observation of Discrete 1D Solitons in an Optically Induced Lattice in Rubidium Atomic Vapor
17:40-18:00	Prof. Daniele Pirone (ISASI-CNR, Italy) (Invited) Title: Intracellular specificity through in silico staining enabled by Holotomography-driven learning in flow cytometry
18:00-18:20	Prof. Yu Wang (Harbin Institute of Technology, China) (Invited) Title: Terahertz multifunctional devices based on electrically controlled liquid crystal with structured electrodes and metasurfaces
18:20-18:30	Dr. Huifang Zhang (University of Electronic Science and Technology of China, China) (Oral) Title: High-Efficient Terahertz Metasurfaces for Simultaneous Polarization Selection and Wavefront Shaping
Time	Content

Tuesday May 5, Light Special Event (voucher for entry)