

2023 Frontiers in Optics + Laser Science

09–12 October 2023

Greater Tacoma Convention Center,
Tacoma (Greater Seattle Area), Washington, USA

Frontiers in Optics + Laser Science will be presented with the Optica Laser Congress as an in-person event with on-demand content.

Pacific Daylight Time (UTC–07:00)

Agenda of Sessions — Monday, 09 October

Pacific Day-light Time (PDT, UTC–07:00)	FiO Room 315	FiO Room 316	FiO Room 317	FiO Room 318	FiO Ballroom BC	LS Ballroom D	Room 405
07:00–18:30	Registration, <i>Third Floor</i>						
10:00–16:30	Exhibit Hours, <i>Exhibit Hall</i>						
08:00–10:00	FM1A • Virtual Reality and Augmented Vision Theme: Your Next Wearable Spatial Computing Platform	FM1B • Quantum Optics and Photonics	FM1C • Optical Instrumentation	FM1D • Signal Processing in Optical Transmission	FM1E • Microscopy and Machine Learning	LM1F • Anderson Dissertation Award Presentations	
10:00–10:45	Coffee Break with Exhibitors, <i>Third Floor</i> <i>Coffee Break Sponsored by American Elements, American Institute of Physics, Meta Platforms Technologies LLC</i>						
10:45–11:30	FM2A • Virtual Reality and Augmented Vision Theme: FiO Visionary Session I, <i>Room 315</i>					LM2B • Strong Field, Ultrafast and Short Wavelength I	
11:45–12:45	FM3A • Virtual Reality and Augmented Vision Theme: Simulating the Next	FM3B • Ultrafast Lasers and Applications	FM3C • Nanophotonics	FM3D • Optical Amplification	FM3E • Ophthalmology and Vision		
12:45–14:00	JM4A • Laser Congress Joint Poster Session I and Lunch with Exhibitors, <i>Exhibit Hall</i>						
14:00–16:00	FM5A • Virtual Reality and Augmented Vision Theme: Future's Wearable Displays	FM5B • Integrated Photonics	FM5C • Optical Fabrication	FM5D • Systems and Sub-systems in Optical Communications	FM5E • Emerging Imaging Technologies in Biomedicine	LM5F • Quantum Information and Entanglement with Photons	FM5G • Optica Foundation Challenge: Environment
16:00–16:30	Coffee Break with Exhibitors, <i>Exhibit Hall</i> <i>Coffee Break Sponsored by American Elements, American Institute of Physics, Meta Platforms Technologies LLC</i>						
16:30–18:30	FM6A • Virtual Reality and Augmented Vision Theme: Emerging Meta Optics for AR/VR	FM6B • Novel Qubits and Emitters; Quantum Communications	FM6C • Optical Metrology	FM6D • Photonic Devices and Integrated Circuits (ends at 19:00)	FM6E • Biophotonics and Applications	LM6F • Strong Field, Ultrafast and Short Wavelength II	
19:00–21:00	Optica Awards Ceremony and Reception, <i>Museum of Glass (Invitation Only)</i>						

Key to Conference Abbreviations

F – Frontiers in Optics
L – Laser Science
Sp – Special Event
J – Joint Session

Agenda of Sessions — Tuesday, 10 October

Pacific Day-light Time (PDT, UTC-07:00)	FiO Room 315	FiO Room 316	FiO Room 317	FiO Room 318	FiO Ballroom BC	LS Ballroom D	Room 405
07:00–18:00	Registration, Third Floor						
10:00–15:30	Exhibit Hours, Exhibit Hall						
08:00–09:00	FTu1A • Virtual Reality and Augmented Vision Theme: Art and Perception	FTu1B • Quantum Technologies Theme: Quantum Computing and its Applications	FTu1C • Complex States of Light I	FTu1D • Advancement in Optical Fibers	FTu1E • Plasmonic and Metamaterials	LTu1F • Quantum Sensing	
09:00–09:15	Break						
09:15–10:00	FTu2A • Quantum Technologies Theme: FiO Visionary Session II, Room 316 LTu2B • LS Visionary Session I, Ballroom D						
10:00–15:30	Science + Industry Showcase Theater			Science + Industry Showcase			
	JTu3A • Joint Plenary Session I, 10:30–11:30 Tech Showcase, 11:40–12:00 The State of Quantum R&D, 12:15–13:15 What Chatbots Mean for Optics, 13:45–14:30 State of the Industry, 14:45–15:30			Coffee Break with Exhibitors, 10:00–10:30 Coffee Break Sponsored by American Elements, American Institute of Physics, Meta Platforms Technologies LLC JTu4A • Joint Poster Session II, 11:30–13:00 Lunch with Exhibitors, 12:45–14:00 JTu5A • Joint Poster Session III, 14:00–15:30 Coffee Break with Exhibitors, 15:00–15:30 Coffee Break Sponsored by American Elements, American Institute of Physics, Meta Platforms Technologies LLC			
15:30–17:00	FTu6A • Virtual Reality and Augmented Vision Theme: Design for Humans	FTu6B • Quantum Technologies Theme: Ion Trap Quantum Computing	FTu6C • Complex States of Light II	FTu6D • Optical System	FTu6E • Beam Steering and Lidar Applications	LTu6F • Biology and Chemistry Applications	FTu6G • Optics Foundation Challenge: Information
17:00–17:30	Break						
17:30–18:30	JTu7A • Joint Postdeadline Session, Room 315					DLS Business Meeting	
18:30–21:00	Conference Reception, Exhibit Hall PreFunction Area						

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Agenda of Sessions — Wednesday, 11 October

Pacific Day-light Time (PDT, UTC-07:00)	FiO Room 315	FiO Room 316	FiO Room 317	FiO Room 318	FiO Ballroom BC	LS Ballroom D	Room 405
07:30–17:00	Registration, <i>Third Floor</i>						
10:00–15:30	Exhibit Hours, <i>Exhibit Hall</i>						
08:00–09:00	FW1A • Machine Learning Theme: Metaoptics and Machine Learning	FW1B • Quantum Technologies Theme: Quantum Communications	FW1C • Light-Matter Interactions I	FW1D • Coherence and Interference	FW1E • High-Speed Modulations	LW1F • Attosecond CM	
09:00–09:15	Break						
09:15–10:00	FW2A • Machine Learning Theme: FiO Visionary Session III, <i>Room 315</i> LW2B • LS Visionary Session II, <i>Ballroom D</i>						
10:00–15:30	Science + Industry Showcase Theater			Science + Industry Showcase, Exhibit Hall			
	JW3A • Joint Plenary Session II, 10:30–11:30 Tech Showcase, 11:40–12:00 Title to be Announced, 12:15–13:15 Navigating Patent and Trade Secret Laws for Optics and Photonics Research and Technology, 13:45–14:30 Title to be Announced, 14:30–15:45			Coffee Break with Exhibitors, 10:00–10:30 <i>Coffee Break Sponsored by American Elements, American Institute of Physics, Meta Platforms Technologies LLC</i> Lunch with Exhibitors, 13:00–14:00 JW4A • Joint Poster Session IV, 14:00–15:30 Coffee with Exhibitors, 15:00–15:30 <i>Coffee Break Sponsored by American Elements, American Institute of Physics, Meta Platforms Technologies LLC</i>			
15:30–17:00	FW5A • Machine Learning Theme: Optical Computing	FW5B • Quantum Technologies Theme: Quantum Technology	FW5C • Light-Matter Interactions II (begins at 15:00)	FW5D • Computational/Transformation Optics and Optics in Computing	FW5E • Lithium Niobate-Based Devices	LW5F • Ultrafast Quantum Materials	FW5G • Optica Foundation Challenge: Health
17:00–17:30	Break						
17:30–19:00	FW6A • Machine Learning Theme: Artificial Intelligence/ Machine Learning for Imaging and Spectroscopy	FW6B • Quantum Technologies Theme: From Quantum Computing to Quantum Sensors	FW6C • Ultrafast Optical Interactions in Nanostructured Materials	FW6D • General Information Acquisition and Processing	FW6E • Photonic Neural Networks	LW6F • Metamaterials I	

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Pacific Daylight Time (PDT, UTC-07:00)	FiO Room 315	FiO Room 316	FiO Room 317	FiO Room 318	FiO Ballroom BC	LS Ballroom D
07:30–14:30	Registration, <i>Third Floor</i>					
08:00–09:00	FTh1A • Machine Learning Theme: Computational Imaging and Machine Learning	FTh1B • Quantum Networking and Metrology	FTh1C • Nonlinear Interactions and Applications	FTh1D • General Information Display Technology	FTh1E • Optomechanic and MEMS	LTh1F • Metamaterials II
09:00–09:15	Break					
09:15–10:00	FTh2A • Machine Learning Theme: FiO Visionary Session IV, <i>Room 315</i> LTh2B • LS Visionary Session III, <i>Ballroom D</i>					
10:00–10:30	Coffee Break, <i>Third Floor</i>					
10:30–12:30	FTh3A • Machine Learning Theme: Inverse Design and Machine Learning	FTh3B • Novel Platforms, Methods, and Devices	FTh3C • Frequency Combs, High-Harmonic Generation, and Attoscience	FTh3D • 3D and Light-Field Optics in Information Acquisition and Display Applications	FTh3E • Frequency Combs and Nonlinear Photonics	LTh3F • Metamaterials III

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