2025 Frontiers in Optics + Laser Science 26–30 October 2025

Colorado Convention Center, Denver, Colorado, USA
Frontiers in Optics + Laser Science will be presented as an in-person event with on-demand content.

Mountain Time (UTC -06:00)

Agenda of Sessions — Sunday, 26 October

09:00–17:00	Demystifying Quantum
13:00–17:00	Registration, Concourse E, Mile-High Pre-Function

Monday, 27 October

Mountain								
Time	FiO	FiO	FiO	FiO	FiO	LS		
(MT, UTC	Room 2A	Room 1A	Room 1B	Room 1C	Room 1D	Room 1E		
-06:00)								
07:00–17:30	Registration, Concourse E, Mile-High Pre-Function							
08:00-09:00								
	Reality and	Computational	Based Imaging and	Photonic Devices	Interactions	Dissertation Award		
	Augmented Reality	Methods in Imaging	Optical Processing	and Subsystems I		Presentations		
	Theme: VR and	and Sensing		-				
	Augmented Vision I							
09:00-09:15			Break					
09:15-10:00		FM2A • FiO Mach	nine Learning Visionary	Session, Room 2A				
10:00–12:00				ournal Editors, Optica N	lember Lounge			
10:00–10:30				e High Pre-Function	<u>J</u>			
10:30–11:30		Optica		: Monitoring Health, Ro	oom 2B			
10:30–12:30	FM3A • Quantum	FM3B • Machine	FM3C • Novel	FM3D • Integrated	FM3E •	LM3F •		
1	Technologies	Learning Theme:	Displays and	Photonic Devices	Computational and	Nanophotonics and		
	Theme: From	Machine Learning I	Diffractive Optics	and Subsystems II	Transformation	Unconventional		
	Quantum	_ · · · · · · · · · · · · · · · · · · ·		,	Optics	Photonics		
	Computing				'			
	Hardware to							
	Quantum Error							
	Mitigation							
11:30–12:30	Optica Foundation Challenge: The Future of Optical Connections for Information Symposium, Room 2B							
12:00–18:00		La	ser Science Undergradı	uate Symposium, Room	3B			
	Lunch Break (on your own) (12:30–14:00)							
		C (12:45–13:45)						
	Optical Materials Studies Technical Group Panel Discussion, Room 1D (12:45–13:45)							
14:00–15:30	Optica Foundation Challenge: Improving Diagnostic and Surgical Outcomes Symposium, Room 2B							
14:00–15:30	FM4A • Quantum	FM4B • Virtual	FM4C • Advanced	FM4D • Highly	FM4E •	LM4F • Excitons and		
	Technologies	Reality and	Microscopy	Integrated Photonic	Nanophotonics	Ultrafast Dynamics		
	Theme: Applications	Augmented Vision		Platforms		in 2D Materials		
	of Quantum	Theme: New						
	Sensors: From	Technologies						
	Neuroscience to	(Begins at 13:30)						
	Gravitational Waves							
15:30–16:00	Coffee Break, Mile High Pre-Function							
15:30–17:00	Optica Foundation Meet the Winners Happy Hour, Room 2B							
16:00–18:00	FM5A • Quantum	FM5B • Virtual	FM5C • Ultrafast	FM5D • Novel	FM5E • Novel	LM5F • Excitons,		
	Technologies	Reality and	Optical Interactions	Imaging Approaches	Devices and	Polaritons, and		
	Theme: From	Augmented Vision			Methods for Optical	Nanolasers		
	Quantum Networks	Theme: New			Transmitters and			
	to Exploiting	Technologies II			Receivers			
	Quantum Light				(ends at 18:15)			
18:30–19:30	Lightening Laser Science Session, Room 3C							
17:30–21:00	FiO+ LS Awards Ceremony and Reception (Invitation Only), Denver Museum of Art							

Key to Conference Abbreviations

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

Agenda of Sessions — Tuesday, 28 October

Mountain Time (MT, UTC –06:00)	FiO Room 2A	FiO Room 1A	FiO Room 1B	FiO Room 1C	FiO Room 1D	LS Room 1E		
07:30–18:30	Registration, Concourse E, Mile-High Pre-Function							
08:00–09:00	FTu1A • Machine Learning Theme: Machine Learning II	FTu1B • All- photonic Quantum Platforms	FTu1C • Structured Photons (ends at 08:45)	FTu1D • Optical Engineering	FTu1E • State of the Art Space Division Multiplexing Optical Fiber Links	LTu1F • Collective Excitations and QED		
09:00–09:15			Br	eak				
09:15–10:00	FTu2A • FiO Virtual Reality and Augmented Vision Visionary Session, Room 2A Mile High Science Visionary Session I, Room 3B							
10:00–10:30	Coffee Break with Exhibitors, Exhibit Hall, Four Seasons Ballroom Sponsored by American Elements, American Institute of Physics, Meta, Optimax Systems Inc., and PerkinElmer							
10:00–16:00		ce + Industry Shov er Four Seasons Ba		Science + Industry Showcase, Exhibit Hall, Four Seasons Ballroom				
	JTu3A • Joint Plenary Session I, 10:30–11:30			Hall Hours 10:00–17:30				
	The Future of Al in the Design of Optics and Photonics,			Career Zone, Booth 407, 10:00–17:30				
	12:30–13:45			Optica Booth, 307, 10:00–15:30				
	What's Needed for Optics in Augmented and Virtual Reality, 14:00-15:15			JTu4A • Poster Session I, 11:30–13:00				
				Lunch with Exhibitors, 12:00–14:00				
				JTu5A • Poster Session II, 14:00–15:30				
11:30–12:30	Quantum Frontiers: Collaboration, Competition, and Convergence in Sensing and Communication, Room 1D							
	Polarization Management and Propagation Technical Group Special Talk, Room 1C							
15:00–15:30	Coffee Break with Exhibitors, Exhibit Hall, Four Seasons Ballroom Sponsored by American Elements, American Institute of Physics, Meta, Optimax Systems Inc., and PerkinElmer							
15:30–17:00	FTu6A • Machine Learning Theme: Machine Learning III (ends at 16:30)	FTu6B • Virtual Reality and Augmented Vision Theme: VR and Augmented Vision II (ends at 17:30)	FTu6C • Quantum Sensing and Imaging	FTu6D • Frontiers in OCT	FTu6E • Advances in Optical Fiber Design and Methods	LTu6F • Coupling and Dynamics in Materials		
17:00–17:15	Break							
17:15–18:30	JTu6A • Joint Postdeadline Session, Room 2A							
18:30–21:00		FiO + LS Conference Reception, Mile-High Ballroom						

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

Agenda of Sessions — Wednesday, 29 October

Mountain Time (MT, UTC –06:00)	FiO Room 2A	FiO Room 1A	FiO Room 1B	FiO Room 1C	FiO Room 1D	LS Room 1E		
07:30-18:00	Registration, ConcourseE, Mile-High Pre-Function							
08:00–09:00	FW1A • Al and Data-driven for Imaging	FW1B • Nonlinear and Topological Photonics	FW1C • Quantum Computing (ends at 08:45)	FW1D • Manufacturing	FW1E • Ultrafast Lasers and Applications I	LW1F • Quantum Sensing and Hybrid Quantum Systems		
9:00			Br	eak				
09:15–10:00		FW2A · FiO Space	ce Optics Visionary I, R	Room 2A Mile High Lw2B · Laser Science Visiona Session II, Room				
10:00–10:30	Coffee Break with Exhibitors, Exhibit Hall, Four Seasons Ballroom Sponsored by American Elements, American Institute of Physics, Meta, Optimax Systems Inc., and PerkinElmer							
10:00–15:30	Science + Industry Showcase, Theater Four Seasons Ballroom				Science + Industry Showcase, Exhibit Hall, Four Seasons Ballroom			
	JW3A · Joint Plenary Session II, 10:30–11:30			Hall Hours 10:00–17:30				
	The Space Optics Industry: Perspectives and Opportunities, 12:45 13:15 Quantum Advantage: Turning Theory into Transformative Technology, 14:00-15:15			Career Zone, Booth 407, 10:00–15:30				
				Optica Booth, 307, 10:00–17:30				
				JW4A · Poster Session I, 11:30–13:00				
				Lunch with Exhibitors, 11:45–14:00				
				JW5A · Poster Session II, 14:00–15:30				
12:30–14:00	Holography and Diffractive Optics Technical Group Networking Lunch and Special Talk, Room 2C							
15:00–15:30	Coffee Break with Exhibitors, Exhibit Hall, Four Seasons Ballroom Sponsored by American Elements, American Institute of Physics, Meta, Optimax Systems Inc., and PerkinElmer							
15:30–17:00	FW6A • Space Optics Theme: Earth-Sensing LIDARs	FW6B • Ultrafast Lasers and Applications II ·	FW6C • Integrated Photonics	FW6D • Machine Learning and Quantum Technology	FW6E • Next- Generation Optical Fiber Transmission Systems and Networks	LW6F • Quantum Optics and Silicon Quantum Photonics		
17:00–17:30	Break							
17:30–19:00	FW7A • Space Optics Theme: Space-Based Laser Communications (ends at 18:30)	FW7B • Hybrid Integrated Quantum Photonic Systems	FW7C • Light- matter Interactions	FW7D • Advanced Sensing Technologies	FW7E • Frequency Combs, High- Harmonic Generation, and Attoscience	LW7F • Quantum Science with NV Centers, Neutral Atoms, and Trapped Ions		
19:30–20:30		Ap	plied Spectroscopy Sp	eed Networking, Room	2C			

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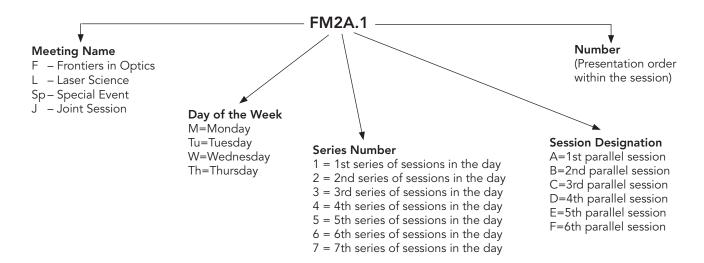
Agenda of Sessions — Thursday, 30 October

Mountain Time (MT, UTC –06:00)	FiO Room 2A	FiO Room 1A	FiO Room 1B	FiO Room 1C	FiO Room 1D	LS Room 1E
07:30–11:00			Registration, Cond	course E, Mile-High Pre-Fo	unction	
08:00-09:00	FTh1A • Space Optics Theme: Space- Based Optical Remote Sensing	FTh1B • Free Space and Quantum Optical Communication	FTh1C • Quantum Correlations	FTh1D • Optoelectronic Sensor Systems	FTh1E • Structured Light I	LTh1F • Strong Fields and High- order Harmonic Generations
09:00–09:15	Break					
09:15–10:00	FTh2A • FiO Space Optics Visionary Session II, Room 2A Mile High LTh2B • Laser Science Visionary Session III, Room 3B					
10:00–10:30	Coffee Break, Mile-High Pre-Function					
10:30–12:30	FTh3A • Space Optics Theme: Advanced Space Optics	FTh3B • Measurement Techniques and Micro and Nano Technology	FTh3C • Ultrafast Photonics	FTh3D • Image Acquisition, Optical Processing and Displays	FTh3E • Structured Light II	LTh3F • Ultrafast Science and Technology, Mile- High Pre-Function

Friday, 31 October

09:00–13:30	JILA Lab Tour (Buses from venue)
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Explanation of Session Codes



The first letter of the code signifies the meeting. The second letter of the code denotes the day of the week (Monday=M, Tuesday=Tu, etc.). The third element indicates the session series in that day. For instance, 1 would denote the first parallel sessions in that day. Each day begins with the letter A in the fourth element and continues alphabetically through a series of parallel sessions. The number on the end of the code (separated from the session code with a period) signals the position of the talk within the session (first, second, third, etc.). For example, a presentation coded FM2A.1 indicates that this FiO paper is being presented on Monday (M) in the second series of sessions (2), and is the first parallel session (A) in that series and the first paper (1) presented in that session.

Online Access to Technical Digest

Full Technical Attendees have both EARLY and FREE perpetual access to the digest papers through the Optica Publishing Group platform.

Current as of 25 September. The updated schedule is available in the mobile app, and the online schedule.