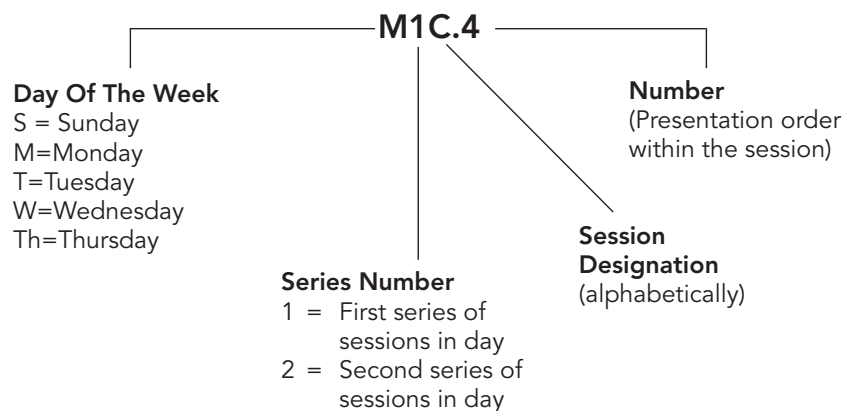


## Explanation of Session Codes



The first letter of the code denotes the day of the week (Sunday=Sunday, Monday=M, Tuesday=Tu, Wednesday=W, Th=Thursday). The second 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 third element and continues alphabetically through a series of parallel sessions. The lettering then restarts with each new series. 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 M1C.4 indicates that this paper is being presented on Monday (M) in the first series of sessions (1), and is the third parallel session (C) in that series and the fourth paper (4) presented in that session.

The information in this program is as of 27 February 2025. All times reflect Pacific Daylight Time (PDT, UTC-07:00). Please consult the conference app for the latest changes.

Technical Registrants: Download digest papers by visiting [ofcconference.org](https://ofcconference.org) and clicking on the "Download Technical Digest Papers" from the right column navigation on the home page.

Recorded sessions are also available 24 hours after the session by navigating to the Schedule tab. Select a session and click the "Watch Recorded Session" button.

# Agenda of Sessions — Sunday, 30 March

	Rooms 201-202	Rooms 203-204	Rooms 205-206	Rooms 209-210	Rooms 211-212	Rooms 213-214	Room 215
07:00–19:00	Registration Open, South Lobby, Moscone Center						
08:30–12:30	SC105, SC203, SC395, SC432, SC463, SC469, SC470*						
09:00–12:00	SC177, SC359, SC459*						
13:00–15:30	S1A • What Will Future Subsea Systems Look Like: Secured and Resilient Networks, Pluggable vs Multicore Interfaces, Solid Vs Hollow Core Fiber?	S1B • Networks of the Future and Next-Generation Production	S1C • How to Get More Out of Fiber Access Networks?	S1D • Linear Algebra Optics: Applications and Commercial Perspectives	S1E • Telecom and Sensing Living Together: Is it a Healthy Relationship?	S1F • Is Coherent DSP Solved? Are we Running Out of Innovation?	S1G • High Power and Multi-Wavelength Laser Light Sources: How Can They Address the Needs of AI/ML Interconnect?
13:00–16:00	SC408, SC485, SC512*						
13:00–17:00	SC267, SC514*						
13:30–17:30	SC216, SC384*						
15:30–16:00	Coffee Break, Level 2 Corridors						
16:00–18:30	S2A • Are we Ready for Hollow Core Fiber Networks?	S2B • How do Co-Packaged Optics Become Manufacturable?	S2C • Watts the Limit? Powering Optical Network Growth	S2D • Unifying Control and Management of Disaggregated Networks with Pluggable Transponders - Who Controls the Pluggables?	S2E • Short and Sweet: How Do We Cost-Optimize a 10 Meter Link for Scaling Up Machine Learning Clusters?	S2F • Towards 400G/λ IM-DD: How to Pick up the Next Factor of 2?	
19:00–21:00	Hack Your Research! Tools and Tricks for Today's Telecommunications Techies, Room 303						

\*Short Courses are an excellent training opportunity to learn about new products, cutting-edge technology and vital information at the forefront of communications. They are offered Sunday and Monday and require an additional fee. Go to [ofcconference.org/shortcourse](https://ofcconference.org/shortcourse) for a list of available short courses and the format in which they will be offered or go to pages 2-3.

# Agenda of Sessions — Monday, 31 March






	Rooms 201-202	Rooms 203-204	Rooms 205-206	Room 207	Room 208
07:00–18:30	Registration Open, South Lobby, Moscone Center				
08:00–18:00	Optica Executive Forum, Lower B2 Level, Marriott Marquis (separate registration required)				
08:00–10:00	M1A • The Year of Quantum: Applications, Architectures and Enabling Technologies for Quantum Communication and Computing I	M1B • Submarine Transmission	M1C • Sensing Applications I	M1D • Multi-Mode and Polarization-Dependent Devices	M1E • System Characterization and Monitoring
08:30–12:30	SC369, SC393, SC443, SC444, SC448, SC452, SC453A, SC454, SC461, SC473, SC483, SC487, SC513, SC525, SC527*				
09:00–12:00	SC114, SC465*				
10:00–10:30	Coffee Break, Level 2 Corridors				
10:30–12:30	M2A • The Year of Quantum: Applications, Architectures and Enabling Technologies for Quantum Communication and Computing II	M2B • Next-Generation Intra-Data Center Connectivity for the AI Era: Meeting Hyperscale Demands with Advanced Technologies	M2C • Sensing Applications II	M2D • Applications of Passive Photonics	M2E • Digital Signal Processing, Machine Learning and Electrically-Enhanced Phase Noise
12:45–13:45	Optica Panel Discussion on Women at the Forefront of Optical Communication (RSVP requested), Rooms 203-204				
13:30–16:30	SC217, SC261, SC447, SC526*				
13:30–17:30	SC160, SC325, SC327, SC357, SC431 SC433 SC451, SC453B, SC528*				
14:00–16:00	M3A • Generative AI in Networking: From Proof of Concept to Production I	M3B • Open Optical Networks for 6G: Do we take the O-RAN path or blaze new trails?	M3C • High Symbol Rates Transceivers	M3D • Satellite and THz Communications	M3E • Integration and Devices for Quantum Systems
14:00–16:00	M3Z • Demo Zone, Room 303				
16:00–16:30	Coffee Break, Level 2 Corridors				
16:30–18:30	M4A • Generative AI in Networking: From Proof of Concept to Production II	M4B • Beyond Telecom: Illuminating Opportunities in Network-Scale Fiber Sensing	M4C • Datacenter Interconnect	M4D • Optical and Microwave Signal Processing	M4E • Quantum Entanglement and Computing (ends at 18:45)
19:00–21:00	Student Party, Lucky Strike Bowling				

\*Short Courses are an excellent training opportunity to learn about new products, cutting-edge technology and vital information at the forefront of communications. They are offered Sunday and Monday and require an additional fee. Go to [ofcconference.org/shortcourse](https://ofcconference.org/shortcourse) for a list of available short courses and the format in which they will be offered or go to pages 2-3.

Rooms 209-210	Rooms 211-212	Rooms 213-214	Room 215	Room 301	Room 304
<b>Registration Open, South Lobby, Moscone Center</b>					
<b>Optica Executive Forum, Lower B2 Level, Marriott Marquis (separate registration required)</b>					
M1F • Hollow and Solid Core Ultra Low Loss Fibers	M1G • Datacenter IM/DD I	M1H • Space-Division Multiplexing and Hollow-Core Fiber Transmission	M1I • Optical X-Haul and In-Door Architectures	M1J • Intelligent and Autonomous Network Management	M1K • Light-Source and Integration I
SC369, SC393, SC443, SC444, SC448, SC452, SC453A, SC454, SC461, SC473, SC483, SC487, SC513, SC525, SC527*					
SC114, SC465*					
<b>Coffee Break, Level 2 Corridors</b>					
M2F • Hollow-Core Fiber Characterizations and Applications	M2G • Datacenter IM/DD II	M2H • Optical Transceiver Technologies	M2I • Coherent Access Networks	M2J • LiDAR, Ranging and Urban Demonstrations	M2K • Light Source and Integration II
<b>Optica Panel Discussion on Women at the Forefront of Optical Communication (RSVP requested), Rooms 203-204</b>					
SC217, SC261, SC447, SC526*					
SC160, SC325, SC327, SC357, SC431 SC433 SC451, SC453B, SC528*					
M3F • Multicore, Hollow Core, and Fiber-Based Networking	M3G • Novel Materials, Metamaterial and Reconfigurable Devices	M3H • Sensing and Monitoring for Network Control and Management	M3I • Optical Switches for Datacenters	M3J • Lasers and Ranging	M3K • Modulators with Silicon and Alternative Materials
<b>M3Z • Demo Zone, Room 303</b>					
<b>Coffee Break, Level 2 Corridors</b>					
M4F • Advanced Fibers and Applications	M4G • Free Space Optical Communications (FSOC) (ends at 18:45)	M4H • Networks with Optical Circuit Switching	M4I • Access Network Coexistence and Convergence	M4J • Fiber and Chip Coupling Interfaces	M4K • Advancement of Integrated PD and APD
<b>Student Party, Lucky Strike Bowling</b>					








# Agenda of Sessions — Tuesday, 01 April

	Rooms 201-202	Rooms 203-204	Rooms 205-206	Room 207	Room 208	Rooms 209-210	Rooms 211-212
07:00–18:30	Registration Open, South Lobby, Moscone Center						
07:30–08:00	Joint Plenary Session Coffee Break, Outside of Esplanade Ballroom						
08:00–10:00	Tu1A • Plenary Session, Esplanade Ballroom						
10:00–17:00	Exhibition, Halls A-F (concessions available)						
10:00–14:00	Unopposed Exhibit-only Time, Exhibition Halls A-F (coffee service 10:00–10:30)						
10:30–12:00	The Art of Writing the Perfect OFC Paper, Room 104						
12:30–14:00	OFC and Co-Sponsors Awards Ceremony and Luncheon, Separate registration required. Salon 9, Marriott Marquis Hotel						
14:00–16:00	Tu2A • Hybrid Satellite/Terrestrial Networks: Where Does the Fiber End, and Satellite Take Over? I	Tu2B • Open-Access Design Platforms for PICs: Driving Sustainable Innovation	Tu2C • Summit on Optics for AI Datacenters	Tu2D • Quantum and Classical Security	Tu2E • Doped Fiber Lasers and Amplifiers I	Tu2F • Modulation and Coding	Tu2G • Filters, Multiplexers and Resonators
16:00–16:30	Coffee Break, Level 2 Corridors and Exhibition Halls A-F						
16:30–18:30	Tu3A • Hybrid Satellite/Terrestrial Networks: Where Does the Fiber End, and Satellite Take Over? II	Tu3B • Crafting Fiber Access Networks for Service Excellence Assurance	Tu3C • Novel Subsystem Concepts	Tu3D • Practical Quantum Networks and Coexistence	Tu3E • Doped Fiber Lasers and Amplifiers II	Tu3F • Optical AI Evaluation and Sensing	Tu3G • Optical Interconnect Technologies
17:15–18:15	Exhibitor Happy Hour, Esplanade Ballroom, Mezzanine						
18:30–20:00	Conference Reception, Salons 7-9, Lower B2 Level, Marriott Marquis Hotel						
19:30–21:00	Rump Session: If a Global Disaster Struck and all the Optical Infrastructure was Wiped Out, Would You Rebuild with Today's Mainstream Technologies?, Rooms 203-204						

Rooms 213-214	Room 215	Room 301	Room 304	Expo Theater I 	Expo Theater II 	Expo Theater III 
Registration Open, South Lobby, Moscone Center				Exhibition Opens 10:00		
Joint Plenary Session Coffee Break, Outside of Esplanade Ballroom						
Tu1A • Plenary Session, Esplanade Ballroom				MW1 • State of the Industry 10:45–12:15  MW2 • New Technologies Driving Spectral Efficiency Gains in Next-Gen Networks - Beyond Modems 12:30–14:00  MW3 • Optical Modules, Transceivers and Applications 14:15–15:45  The Journey to Optimize Converged IP and Optical 16:00–17:00	SF1 • OPC: Lighting the Path to Exascale AI: Photonics in High-Performance Clusters 10:45–11:45  DCS • Keynote: Potential Brick Walls in the Age of AI/ML 12:00–12:30  DCS1 • Trends at Data Centers. Architectures, Enablers and Challenges 12:30–14:00  DCS2 • The Impact of AI on Networking Inside and Outside of the Date Center 14:15–15:45  SF2 • IEEE Future Directions: The Emerging Photonics Ecosystem for AI/ML Interconnects. 16:00–17:00	SF3 • MOPA: Optical Solutions for Open Cloud RAN with 6G 11:00–12:00  Tech Showcase: Optimized Interconnect for Ethernet Scale-Out and Scale-Up  BROADCOM 12:15–12:45  Tech Showcase: Lighting the Future, Open Optical Networking at the Intersection of AI and Photonics  Infinera 13:00–13:30  OFCnet Overview and Architecture Focus 13:45–14:15  SF4 • OpenROADM MSA Updates and Demonstration 14:30–15:30  Fiber Sensing 15:45–16:15  Applications - Timing Presentation 16:30–17:00
Exhibition, Halls A-F (concessions available)						
Unopposed Exhibit-only Time, Exhibition Halls A-F (coffee service 10:00–10:30)						
The Art of Writing the Perfect OFC Paper, Room 104						
OFC and Co-Sponsors Awards Ceremony and Luncheon, Separate registration required. Salon 9, Marriott Marquis Hotel						
Tu2H • Optical Network Optimization and Routing	Tu2I • Coherent PON Optimization	Tu2J • Modulator Structures with EML, Thin Film LN and Ring-Based	Tu2K • Stable Lasers and Applications in Fiber Sensing			
Coffee Break, Level 2 Corridors and Exhibition Halls A-F						
Tu3H • Programmable and Interferometric Photonics Processors	Tu3I • Advanced Transmission Technologies	Tu3J • Integrated Micro-Ring and Micro-Disk Modulators	Tu3K • Modelling for Ultra-Wideband Transmission			
Exhibitor Happy Hour, Esplanade Ballroom, Mezzanine						
Conference Reception, Salons 7-9, Lower B2 Level, Marriott Marquis Hotel						
Rump Session: If a Global Disaster Struck and all the Optical Infrastructure was Wiped Out, Would You Rebuild with Today's Mainstream Technologies?, Rooms 203-204						

# Agenda of Sessions — Wednesday, 02 April








	Rooms 201-202	Rooms 203-204	Rooms 205-206	Room 207	Room 208	Rooms 209-210	Rooms 211-212
06:00–07:00	OFC Fun Run/Walk, <i>Dr. Martin Luther King Fountain, 750 Howard Street</i>						
07:30–18:00	Registration Open, <i>South Lobby, Moscone Center</i>						
08:00–10:00	W1A • Network Evolution and AI	W1B • Which Phase Tuning Technologies Have the Potential to Supplant Thermal Tuning in Silicon Photonics?	W1C • Submarine and Field Trials	W1D • Optical Signal Processing	W1E • Datacenter Wavelength and Mode Multiplexing	W1F • High-Speed Direct-Detection PON	W1G • Light-Source, QD and Comb
10:00–17:00	Exhibition, <i>Halls A-F, (concessions available, coffee service 10:00–10:30)</i>						
10:00–14:00	Unopposed Exhibit-only Time, <i>Exhibition Halls A-F</i>						
10:30–12:30	W2A • Joint Poster Session I, <i>Room 303</i>						
12:00–13:00	Optica Panel Discussion on Challenges and Solutions for Enabling Distributed Fiber Optical Sensing Networks, <i>(RSVP requested) Rooms 203-204</i>						
12:30–14:00	The Journal Review Process: All You Need to Know!, <i>Room 104</i>						
14:00–16:00	W3A • Advanced Packaging and Integrated Optics for Scale-Up AI interconnects I	W3B • Towards Operational Large-Scale Quantum Networks	W3C • Multi-Core Fibers	W3D • Photonics Enabled High Performance Computing	W3E • Optical Performance Monitoring and Longitudinal Power Monitoring	W3F • Switches and Control of Photonic Circuits	W3G • Imaging and Shape Sensing
16:00–16:30	Coffee Break, <i>Level 2 Corridors and Exhibition Halls A-F</i>						
16:30–18:30	W4A • Advanced Packaging and Integrated Optics for Scale-Up AI interconnects II	W4B • In Future Fixed Access, is Monitoring Built in For Free?	W4C • SDM Fiber Cables	W4D • Novel Photonic Computing and Switching Paradigms		W4E • Advanced Optical and Electronic Techniques in Transmission	W4F • Integrated Sensing and Communication in RoF/FSO (ends at 18:45)
17:00–18:00	Network Operator Happy Hour, <i>Mezzanine Alcove</i>						
17:00–19:00	Photonics Society of Chinese Heritage: Photonics Horizons: the Future of AI, Computing, and Connectivity, <i>Room 208</i>						

Rooms 213-214	Room 215	Room 301	Room 304	Expo Theater I 	Expo Theater II 	Expo Theater III 
OFC Fun Run/Walk, Dr. Martin Luther King Fountain, 750 Howard Street				<b>Exhibition Opens at 10:00</b>		
Registration Open, South Lobby, Moscone Center				NOS • Keynote: Empowering Hyper-Connected Digital Ecosystems with Programmable Networks 10:15–10:45	SF6 • Ethernet Alliance: Will the Complexity and Higher Link Speeds of Hyperscale Data Centers Hinder Interoperability? 10:15–11:15	Tech Showcase: Source to Solutions, Semiconductor Devices and Fiber Lasers  <b>VITAL</b> 10:15–10:45
W1H • Optical Wireless Communication (OWC)	W1I • Waveguide Devices Based on Nonlinearities	W1J • Long-Distance and CV-QKD	W1K • Modelling and Nonlinearity Mitigation/Compensation	NOS1 • Panel I: Interoperation of Optical Pluggable Transceivers and IP/Optical Integration 10:45–12:15	SF7 • Open XR Optics Forum: Open XR Optics Update 11:30–12:30	Tech Showcase: Advanced Circuit Board Technology for High Speed Optical Interconnects  11:00–11:30
Exhibition, Halls A-F, (concessions available, coffee service 10:00–10:30)				NOS2 • Panel II: Optical Access, Radio Access Networks, Front- and Backhaul 12:30–14:00	SF8 • ITU-T SG15: Standards Update on Higher Speed PON, Latest OTN Technologies and Interoperable Optical Interfaces 12:45–13:45	Application Demonstrations - Network Performance 13:00–13:30
Unopposed Exhibit-only Time, Exhibition Halls A-F				MW4 • Inside Data Centers: Pluggable Optics Evolution 14:15–15:45	SF9 • AIM Photonics Presents PICs, Heterogeneous Integration, and Packaging for Next-Gen Integrated Photonics 14:00–15:00	SF10 • ETSI F5G: Advances in International Standards on Optical Networks Towards 2030 13:45–14:45
W2A • Joint Poster Session I, Room 303				SF5 • OIF: Coherent Optics Unleashed: 400ZR Success to 800ZR/LR Advancements and 1600ZR/ZR+ Kick-off 16:00–17:00	Shining Light on Interconnect Trends Shaping Tomorrow's Data Centers  15:15–16:15	Tech Showcase: Arrayed Fiber Optics Innovative Multi-Fiber Connectors for the AI Age  15:00–15:30
Optica Panel Discussion on Challenges and Solutions for Enabling Distributed Fiber Optical Sensing Networks, (RSVP requested) Rooms 203-204				Network Operator Briefing 16:30–17:00		
The Journal Review Process: All You Need to Know!, Room 104				<b>Exhibition Closes at 17:00</b>		
W3H • Coherent and Direct Detect Transmission Technologies	W3I • Radio-over-Fiber (RoF) Transmission	W3J • Sensing and Protection in Access Networks	W3K • Specialty Fiber Devices I			
Coffee Break, Level 2 Corridors and Exhibition Halls A-F						
W4G • Digital Twins in Network Control and Management	W4H • Machine Learning DSP	W4I • CV-QKD and Frequency Combs	W4J • Specialty Fiber Devices II			
Network Operator Happy Hour, Mezzanine Alcove						
Photonics Society of Chinese Heritage: Photonics Horizons: the Future of AI, Computing, and Connectivity, Room 208						



# Agenda of Sessions — Thursday, 03 April

	Rooms 201-202	Rooms 203-204	Rooms 205-206	Room 207	Room 208	Rooms 209-210	Rooms 211-212
07:30–16:30	<b>Registration Open</b> , <i>South Lobby, Moscone Center</i>						
8:00–10:00	<b>Th1A • Machine Learning for Network Operations</b>	<b>Th1B • Weather Resilient Communications of the Future</b>	<b>Th1C • Optical Computing</b>	<b>Th1D • Coherent for Datacenters</b>	<b>Th1E • Advanced Modulator and Detectors</b>	<b>Th1F • Photonic Advancements for Scalable and Secured Networks</b>	<b>Th1G • Low Loss Passives</b>
10:00–16:00	<b>Exhibition</b> , <i>Halls A-F, (concessions available, coffee service 10:00–10:30)</i>						
10:00–14:00	<b>Unopposed Exhibit-only Time</b> , <i>Exhibition Halls A-F</i>						
10:30–12:30	<b>Th2A • Posters Session II</b> , <i>Room 303</i>						
14:00–16:00	<b>Th3A • Frontiers of Optical Network Architecture Summit – Network Architecture Evolution in the Age of AI</b>	<b>Th3B • What Building-to-Building Optical Interconnect Will Enable Gigawatt Scale Training Clusters?</b>	<b>Th3C • Ultra-Wideband Transmission</b>	<b>Th3D • Point to Multipoint and Satellite Networks</b>	<b>Th3E • Photo-Detector and Integration</b>	<b>Th3F • Fiber Sensing and Characterization</b>	<b>Th3G • Enabling Techniques for PON</b>
16:00–16:30	<b>Coffee Break</b> , <i>Level 2 Corridors</i>						
16:30–18:30	<b>Postdeadline Paper Sessions</b> , <i>Rooms 203-204, 205-206, 211-212, 213-214</i>						

Rooms 213-214	Room 215	Room 301	Room 304	Expo Theater I  	Expo Theater II 	Expo Theater III 
Registration Open, South Lobby, Moscone Center				Exhibition Opens at 10:00		
Th1H • Multiband Optical Networks	Th1I • Distributed Acoustic Sensing	Th1J • Advances in Future PON	Th1K • Direct Detection DSP	MW5 • Optical Network Evolution for AI/ML, Architectures and Drivers 10:15–11:45	SF13 • Hyperlight - Commercial Readiness of Thin-Film Lithium Niobate Photonics 10:15–11:15	Tech Showcase: Introduction to NGK Bonded Wafer for Optical Communication  NGK INSULATORS 10:15–10:45
Exhibition, Halls A-F, (concessions available, coffee service 10:00–10:30)				MW6 • Digital Twin, Telemetry, Monitoring and Testing 12:00–13:30	SF14 • Cable Labs: Out of the Darkness: A Sneak Peek at CableLabs' CPON Specifications 11:30–12:30	Quantum at OFCnet 11:00–11:30
Unopposed Exhibit-only Time, Exhibition Halls A-F				SF11 • OPC: Moving Beyond 200 Gb/s Signaling and the Future of AI Systems 13:45–14:45	SF15 • OIF: Optical Interconnects for AI 12:45–13:45	Tech Showcase: Suzhou Suna Optoelectronics Co., Ltd  <b>SUNA</b> 11:45–12:15
Th2A • Posters Session II, Room 303				SF12 • Advanced Photonics Coalition From Vision to Reality: Enabling Robust Volume Manufacturing of Photonic ICs for AI Networks 15:00–16:00	SF16 • Coherent Moving to Client Optics 14:00–15:00	Tech Showcase: Sumitomo Electric Lightwave  SUMITOMO ELECTRIC LIGHTWAVE 13:15–13:45
Th3H • Packaging and Coupling Techniques	Th3I • Free-Space Optical QKD, QRNG, and Classical Techniques	Th3J • Device Applications for Wireless Communications	Th3K • Coherent DSP	Application Demonstrations at OFCnet 15:15–15:45	SF17 • IPEC: How Will Optical Interconnects to Meet AI Demand? 14:45–15:45	
Coffee Break, Level 2 Corridors				Exhibition Closes at 16:00		
Postdeadline Paper Sessions, Rooms 203-204, 205-206, 211-212, 213-214						