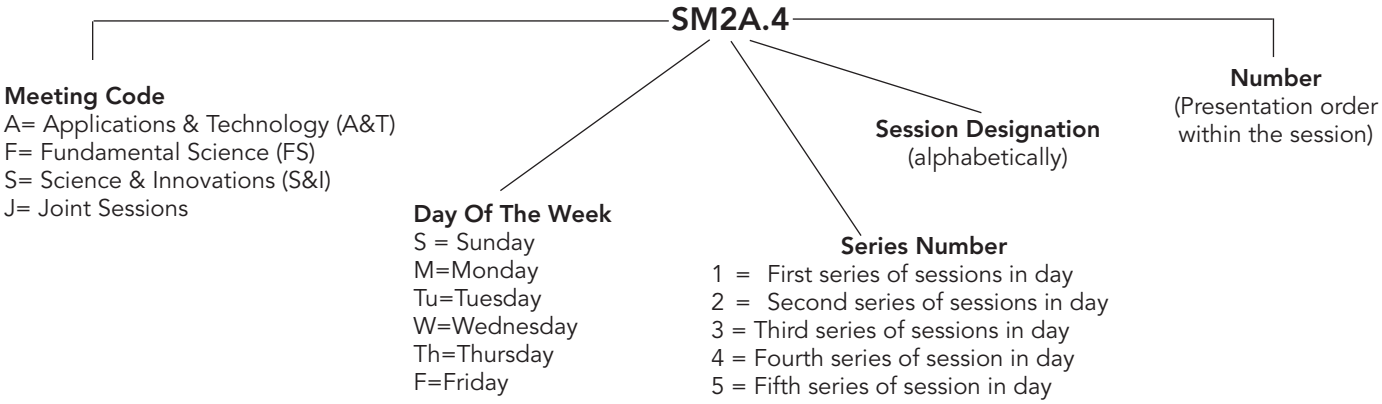
CLEO Conference
05–10 May 2024

Agenda of Sessions — Sunday, 05 May

Eastern Daylight Time Zone (EDT)	
07:00–17:30	Registration
08:30–12:30	**Short Courses** SC515: Optical Machine Learning
13:30–17:30	**Short Courses** SC157: Characterization and Synthesis of Laser Beam Shapes: From Optimum Spatial Shaping to Optical Vortex Beam Generation SC149: Foundations of Nonlinear Optics SC455: Integrated Photonics for Quantum Information Science and Technology SC479: Introduction to Quantum Optics

Explanation of Session Codes



The first letter of the code designates the meeting (For instance, A=Applications & Technology, F=Fundamental Science, S=Science and Innovations, J=Joint). The second element denotes the day of the week (Monday=M, Tuesday=Tu, Wednesday=W, Thursday=Th, Friday=F). The third element indicates the session series in that day (for instance, 2 would denote the second parallel sessions in that day). Each series of sessions 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 SM2A.4 indicates that this paper is part of Science and Innovations (S) and 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 fourth paper (4) presented in that session.

Agenda of Sessions — Monday, 06 May

Eastern Daylight Time Zone (EDT)	Meeting Room W201AB	Meeting Room W201CD	Meeting Room W204AB	Meeting Room W205AB	Meeting Room W205CD	Meeting Room W206A	Meeting Room W206B	Meeting Room W207A	Meeting Room W207BC
07:00-18:00	Registration								
08:00–10:00	AM1A • Tools and Metrology for Fiber Communication Systems	SM1B • Novel Concepts in Fiber Optics	AM1C • Laser Systems and Diagnostics for Processing and Machining	SM1D • Novel Fabrication of Passive Optical Components	SM1E • Multimode Fibers I	SM1F • Quantum Emitters I	SM1G • Ranging, Calibration and Sensing	SM1H • New Development in Femtosecond Oscillators	SM1I • Advances in Integrated Photonics
08:30–12:30	**Short Courses** SC361: Coherent Mid-IR Light: Generation and Applications SC410: Finite Element Modeling Methods for Photonics and Optics SC396: Principles and Applications of Guided Wave Nonlinear Optics SC516: Single Photon Generation, Detection and Applications								
10:00–10:30	Coffee Break								
10:30–12:30	AM2A • Fiber-based Sensing I: Acoustics Acceleration	FM2B • Attosecond Electron Sources and Dynamics	AM2C • Femtosecond Laser Processing for Functional Dielectrics	SM2D • Infrared Photonic Devices and Characteristics	FM2E • Multimode Fibers II	FM2F • Quantum Emitters II	SM2G • MOptical Frequency References and Transfer	SM2H • Ultrafast Spectroscopy and Pulse Characterization for the Deep and Extreme Ultraviolet	SM2I • Integrated Methods
12:30–13:30	Lunch (on Your Own)								
13:30–15:30	AM3A • Fiber-based Sensing II: Strain Curvature	FM3B • Techniques in Attosecond Science	AM3C • Laser-based Nanofabrication	JM3D • Symposium: Solution-Processable Photonics: From Materials and Concepts to Practical Devices I	SM3E • Multimodal Microscopy for Biophotonics	FM3F • Quantum Interfaces in Diamond	SM3G • Integrated Photonic Devices	AM3H • A&T Topical Review on Frequency Comb Spectroscopy: From the VUV to THz I	SM3I • Hollow Core Fibers
13:30–17:30	**Short Courses** SC477: LiDAR and Remote Sensing: An Application-Oriented Introduction SC475: Metasurface Flat Optics SC352: Ultrafast Laser Pulse Compression, Shaping and Characterization								
15:30–16:00	Coffee Break								
16:00–18:00	AM4A • Advanced Imaging Techniques Microscopy and 3D Surface Metrology	FM4B • Short-wavelength Quantum Photonics (Joint FS3+FS7)	SM4C • Quasi-particles and Low-dimensional Materials	JM4D • Symposium: Solution-Processable Photonics: From Materials and Concepts to Practical Devices II	SM4E • Biophotonic Devices and Sensing	FM4F • Interfacing and Control for Single Emitter Quantum Systems	SM4G • Heterogeneous Integration	AM4H • A&T Topical Review on Frequency Comb Spectroscopy: From the VUV to THz II	SM4I • Mode-Locked Fiber Lasers

Eastern Daylight Time Zone (EDT)	Meeting Room W207D	Meeting Room W208	Meeting Room W209A	Meeting Room W209B	Meeting Room W209C	Meeting Room W209DE	Meeting Room W209F	Meeting Room W210	Meeting Room W211
07:00-18:00	Registration								
08:00–10:00	AM1J • Photonic Devices	FM1K • Quantum Information Processing	SM1L • Integrated RF Photonics	SM1M • Microcombs	FM1N • Ultrafast and Nonlinear Phenomenon in Plasmonics and Nanophotonics	SM1O • Emitters and Isolator Materials	SM1P •THz Generation, Sources and Devices	AM1Q • A&T Topical Review on Advanced Imaging and Microscopy 3D Biology, Neuroscience and Coherence-Domain Biophotonics I	SM1R • Atomic Clocks and Quantum Sensing
08:30–12:30	**Short Courses** SC361: Coherent Mid-IR Light: Generation and Applications SC410: Finite Element Modeling Methods for Photonics and Optics SC396: Principles and Applications of Guided Wave Nonlinear Optics SC516: Single Photon Generation, Detection and Applications								
10:00–10:30	Coffee Break								
10:30–12:30	AM2J • Silicon Photonic Devices	FM2K • Photonics for Quantum Computational Tasks	FM2L • Metamaterials and Nanostructures	SM2M • Integrated Photonics for Beamsteering and Beamforming	FM2N • Topological Optics and Nonlinear Metasurfaces	SM2O • Reconfigurable Photonics Devices	SM2P • THz Photonics, Sensing and Detection	AM2Q • A&T Topical Review on Advanced Imaging and Microscopy 3D Biology, Neuroscience and Coherence-Domain Biophotonics II	FM2R • Quantum-Enhanced Sensing
12:30–13:30	Lunch (on Your Own)								
13:30–15:30	AM3J • Integrated Laser and LIDAR	FM3K • Quantum Secure Communications	FM3L • Metasurfaces and Advanced Metamaterials	SM3M • Quantum and Photonic Computing I	SM3N • Nonlinear Integrated Photonics I	FM3O • Plasmonic Nanophotonic Metasurfaces	SM3P • THz Spectroscopy and Imaging	SM3Q • Controlled Continuum Generation with Novel Media and Light Sources	FM3R • Techniques for Quantum Spectroscopy
13:30–17:30	**Short Courses** SC477: LiDAR and Remote Sensing: An Application-Oriented Introduction SC475: Metasurface Flat Optics SC352: Ultrafast Laser Pulse Compression, Shaping and Characterization								
15:30–16:00	Coffee Break								
16:00–18:00	AM4J • High-Speed Modulators	FM4K • Photonic Quantum State Engineering	SM4L • High Precision Spectroscopy and Waveform Characterization	SM4M • Quantum and Photonic Computing II	SM4N • Nonlinear Integrated Photonics II	FM4O • Application of Photonic & Plasmonic Metasurfaces	SM4P • THz Metasurfaces	SM4Q • Advances in Nonlinear Pulse Compression and Characterization	FM4R • Quantum Estimation and Characterization

Agenda of Sessions — Tuesday, 07 May

Eastern Daylight Time Zone (EDT)	Meeting Room W201AB	Meeting Room W201CD	Meeting Room W204AB	Meeting Room W205AB	Meeting Room W205CD	Meeting Room W206A	Meeting Room W206B	Meeting Room W207A	Meeting Room W207BC
07:00–18:30	**Registration**								
08:00–10:00	**JTu1A • Joint Plenary Session I,** *CLEO Hub Theater*								
10:00–16:00	**Exhibits Hours, CLEO Hub** **Exhibit Only Hours: 10:00–13:00 and 15:00–16:00** **Coffee with Exhibits: 10:30–11:30** *Sponsored by Thorlabs, inc, IPG Photonics and OZ Optics Limited*								
10:30–12:00	**Market Focus Panel I: Space Optics,** *CLEO Hub Theater*								
10:30–14:30	**Short Courses** **SC518: Communication With Light** **SC534: Managing Diversity Teams in STEM NEW** **SC438: Photonic Metamaterials**								
11:30–13:00	**JTu2A • Joint Poster Session I**								
12:30–12:50	**Technology Showcase: IPG's CLPF Series: New Universal Platform for Optical Frequency Comb Generation from the UV to THz** *Sponsored by IPG Photonics*								
13:00–15:00	**ATu3A • Guided Photons at Work for Environmental Sensing**	**ATu3B • Optical Biosensors**	**STu3C • Vertical Cavity Surface Emitting Lasers**	**STu3D • Fiber Amplifiers**	**STu3E • Nonlinear Photonics Materials and Devices**	**FTu3F • Entangled Fiber Optic Networks**	**FTu3G • Applications of Metamaterials and Complex Media I**	**ATu3H • A&T Topical Review on Silicon Photonics for Optical I/O, Artificial Intelligence and High-Performance Computing I**	**FTu3I • Nanophotonic Coupling to Solid State Spins**
14:30–16:00	**Market Focus Panel II: Update on CHIPS Act Awards and Related Efforts,** *CLEO Hub Theater*								
15:00–16:00	**Coffee Break and Exhibit Only Time** *Sponsored by IPG Photonics and OZ Optics Limited*								
16:00–18:00	**ATu4A • From Land to Sea-Novel Sensing Techniques for Aqueous to Terrestrial Environments**	**ATu4B • Novel Microscopic and Graphene Based Biophotonics**	**STu4C • High Power Semi-conductor Lasers**	**STu4D • Fiber Lasers and Amplifiers**	**STu4E • Integrated Photonics with New Platforms**	**FTu4F • Entanglement in Time and Frequency**	**FTu4G • Applications of Metamaterials and Complex Media II**	**ATu4H • A&T Topical Review on Silicon Photonics for Optical I/O, Artificial Intelligence and High-Performance Computing II**	**STu4I • Single Photon Detectors & Integrated Devices**
18:00–19:30	**Conference Reception,** *NASCAR Hall of Fame*								

Eastern Daylight Time Zone (EDT)	Meeting Room W207D	Meeting Room W208	Meeting Room W209A	Meeting Room W209B	Meeting Room W209C	Meeting Room W209DE	Meeting Room W209F	Meeting Room W210	Meeting Room W211
07:00–18:30	**Registration**								
08:00–10:00	**JTu1A • Joint Plenary Session I,** *CLEO Hub Theater*								
10:00–16:00	**Exhibits Hours, CLEO Hub** **Exhibit Only Hours: 10:00–13:00 and 15:00–16:00** **Coffee with Exhibits: 10:30–11:30** *Sponsored by Thorlabs, inc, IPG Photonics and OZ Optics Limited*								
10:30–12:00	**Market Focus Panel I: Space Optics,** *CLEO Hub Theater*								
10:30–14:30	**Short Courses** **SC518: Communication With Light** **SC534: Managing Diversity Teams in STEM NEW** **SC438: Photonic Metamaterials**								
11:30–13:00	**JTu2A • Joint Poster Session I**								
12:30–12:50	**Technology Showcase: IPG's CLPF Series: New Universal Platform for Optical Frequency Comb Generation from the UV to THz** *Sponsored by IPG Photonics*								
13:00–15:00	**ATu3J • Integrated Photonic Subsystems**	**JTu3K • Symposium: Dissipative Temporal Solitons and Frequency Combs via Quadratic Nonlinearities I**	**FTu3L • Atomic Quantum Metrology**	**JTu3M • Symposium: Laser-driven Nuclear Fusion: A 60-year Success Story**	**JTu3N • Structured Light and Beam Shaping (Joint SI1+FS5)**	**FTu3O • New Methods for Single and Entangled Photon Generation**	**STu3P • Optical Computing and Signal Processing**	**STu3Q • Micro and Nanocavities I**	**FTu3R • Optical Thermodynamics**
14:30–16:00	**Market Focus Panel II: Update on CHIPS Act Awards and Related Efforts,** *CLEO Hub Theater*								
15:00–16:00	**Coffee Break and Exhibit Only Time** *Sponsored by IPG Photonics and OZ Optics Limited*								
16:00–18:00	**ATu4J • Advances in LEDs**	**JTu4K • Symposium: Dissipative Temporal Solitons and Frequency Combs via Quadratic Nonlinearities II**	**FTu4L • Rydberg Quantum Devices**	**ATu4M • Lithium Niobate Integrated Photonics**	**STu4N • Next Generation Lidar**	**FTu4O • Quantum Effects in Nanophotonics**	**STu4P • Fundamental Component for Optical Computing**	**STu4Q • Micro and Nanocavities II**	**FTu4R • Ultrafast Optics, Time Varying Media and Time Crystals**
18:00–19:30	**Conference Reception,** *NASCAR Hall of Fame*								

Agenda of Sessions — Wednesday, 08 May

Eastern Daylight Time Zone (EDT)	Meeting Room W201AB	Meeting Room W201CD	Meeting Room W204AB	Meeting Room W205AB	Meeting Room W205CD	Meeting Room W206A	Meeting Room W206B	Meeting Room W207A	Meeting Room W207BC
07:30–18:00	**Registration**								
08:00–10:00	**JW1A • Joint Plenary Session II,** *CLEO Hub Theater*								
10:00–16:00	**Exhibits Hours, CLEO Hub** **Exhibit Only Hours: 10:00–13:00 and 15:00–16:00** **Coffee Break: 10:00–11:30** *The Hub* *CLEO Hub Sponsored by Thorlabs, Inc.* *Coffee Break Sponsored by IPG Photonics and OZ Optics Limited*								
10:30–12:00	**Market Focus Panel: Quantum Leap or Letdown; Examining the Business Case for Quantum Technologies,** *CLEO Hub Theater*								
11:30–13:00	**JW2A • Joint Poster Session II**								
13:00–15:00	**SW3A • Advances in High Power Femtosecond Amplifiers**	**FW3B • Advances in Ultrafast Techniques and Optoelectronic Applications**	**FW3C • Methods for Future Extreme Light Sources**	**AW3D • Quantum Key Distribution (QKD) I**	**JW3E • Symposium: Spectroscopic Advances in Biophotonics I**	**SW3F • Nonlinear Optics in Microresonators I**	**JW3G • Symposium: Nonlinear Terahertz Photonics**	**SW3H • Semiconductor Lasers for Neural Networks and Data Communication**	**FW3I • ASensing and Manipulating Quantum Phases in 2D Materials and Quantum Wells**
14:30–16:00	**Market Focus Panel: Laser Fusion,** *CLEO Hub Theater*								
15:00–16:00	**Coffee Break and Exhibit Only Time** *The Hub* *CLEO Hub Sponsored by Thorlabs, Inc.* *Coffee Break Sponsored by IPG Photonics and OZ Optics Limited*								
16:00–18:00	**SW4A • Spatial and Temporal Control of Femtosecond Laser Pulses**	**FW4B • Excitons in Two-dimensional Materials and van der Waals Heterostructures**	**FW4C • High Harmonic Generation in Condensed Matter**	**AW4D • Quantum Key Distribution (QKD) II and Deployed Quantum Systems**	**JW4E • Symposium: Spectroscopic Advances in Biophotonics II**	**SW4F • Nonlinear Optics in Microresonators II**	**JW4G • Symposium: Disruptive Photonic Detectors: Recent Advancement and Development with Novel Optical Materials**	**AW4H • Quantum and Nonlinear Photonics**	**FW4I • THz Spectroscopy of Light-matter Interactions**
18:30–22:00	**UNC Charlotte Center for Optoelectronics and Optical Communications Lab Tour and Reception** *(Separate sign-up required)*								

Eastern Daylight Time Zone (EDT)	Meeting Room W207D	Meeting Room W208	Meeting Room W209A	Meeting Room W209B	Meeting Room W209C	Meeting Room W209DE	Meeting Room W209F	Meeting Room W210	Meeting Room W211
07:30–18:00	**Registration**								
08:00–10:00	**JW1A • Joint Plenary Session II,** *CLEO Hub Theater*								
10:00–16:00	**Exhibits Hours, CLEO Hub** **Exhibit Only Hours: 10:00–13:00 and 15:00–16:00** **Coffee Break: 10:00–11:30** *The Hub* *CLEO Hub Sponsored by Thorlabs, Inc.* *Coffee Break Sponsored by IPG Photonics and OZ Optics Limited*								
10:30–12:00	**Market Focus Panel: Quantum Leap or Letdown; Examining the Business Case for Quantum Technologies,** *CLEO Hub Theater*								
11:30–13:00	**JW2A • Joint Poster Session II**								
13:00–15:00	**AW3J • Photonic Foundry Development**	**FW3K • Hybrid Quantum Photonics**	**JW3L • Symposium: Warm Vapor Quantum Devices I**	**FW3M • Topological Processes I**	**SW3N • Free Space Communications and Satellite Networks**	**SW3O • Advanced Lasers on Chip**	**FW3P • Free Electron Physics**	**FW3Q • Optical Computation and Synthetic Dimensions**	**SW3R • Electro-optic Modulators**
14:30–16:00	**Market Focus Panel: Laser Fusion,** *CLEO Hub Theater*								
15:00–16:00	**Coffee Break and Exhibit Only Time** *The Hub* *CLEO Hub Sponsored by Thorlabs, Inc.* *Coffee Break Sponsored by IPG Photonics and OZ Optics Limited*								
16:00–18:00	**FW4J • Quantum Many-Body Systems and Collective Effects**	**SW4K • Microcavities for Quantum Photonics**	**JW4L • Symposium: Warm Vapor Quantum Devices II**	**FW4M • Topological Processes II**	**SW4N • Optical Networks for Future Wireless Systems**	**SW4O • Metasurfaces and Photonics Crystals**	**SW4P • Mid-infrared On-Chip Photonics**	**FW4Q • Machine Learning for Metamaterial Design**	**SW4R • New Materials for Advanced Modulators**
18:30–22:00	**UNC Charlotte Center for Optoelectronics and Optical Communications Lab Tour and Reception** *(Separate sign-up required)*								

Agenda of Sessions — Thursday, 09 May

Eastern Daylight Time Zone (EDT)	Meeting Room W201AB	Meeting Room W201CD	Meeting Room W204AB	Meeting Room W205AB	Meeting Room W205CD	Meeting Room W206A	Meeting Room W206B	Meeting Room W207A	Meeting Room W207BC
07:30–17:00	Registration								
08:00–10:00	ATh1A • Frequency Combs and Their Applications	ATh1B • New Technologies for Diagnosis and Treatment of Cancer	STh1C • Ultrafast Optics and Wave Mixing	FTh1D • Nonlinearity in Fibers and Waveguides	ATh1E • From the Lab to the Field-Laser Based Atmospheric Sensing	STh1F • Hardware for Quantum Networks	ATh1G • Advances in Quantum Sensing	ATh1H • A&T Topical Review on Shaping the Future of Laser-Plasma Applications with Structured Light Fields I	STh1I • Quantum and Light Matter Interactions
10:00–13:00	**Exhibits Hours, CLEO Hub** **Coffee Break: 10:00-11:30** *CLEO Hub sponsored by Thorlabs, Inc.* *Coffee Break Sponsored by IPG Photonics and OZ Optics Limited*								
11:30–13:00	JTh2A • Joint Poster Session III								
13:00–15:00	ATh3A. Environmental and Biometric Sensing	ATh3B • Optical Coherence Tomography and Bio-Optical Sensing	STh3C • Fiber and Chip-Scale Sources	STh3D • Non-Hermitian and Nonlinear System	ATh3E • Development for Atmospheric Sensing	STh3F • Lithium Niobate Photonics	ATh3G • Integration and Trapped Quantum Systems	ATh3H • A&T Topical Review on Shaping the Future of Laser-Plasma Applications with Structured Light Fields II	STh3I • Optical Parametric Oscillators
15:00–15:30	Coffee Break								
15:30–17:30	ATh4A • Novel Light Sources for Hyperspectral Imaging and Tomography	ATh4B • Silicon Photonics for Healthcare	STh4C • Photonics and Brillouin Optomechanics	FTh4D • Non-hermiticity and Synthetic Dimensions	ATh4E • Remote Sensing for Terrestrial and Space Applications	FTh4F • Solitons and Frequency Combs	ATh4G • Qubits and Quantum Sources	ATh4H • A&T Topical Review on Shaping the Future of Laser-Plasma Applications with Structured Light Fields III	STh4I • Approaches for Broadband Light Generation
17:30–19:00	Dinner Break (on your own)								
19:00–21:00	JTh5A • Joint Postdeadline Paper Presentations								

Eastern Daylight Time Zone (EDT)	Meeting Room W207D	Meeting Room W208	Meeting Room W209A	Meeting Room W209B	Meeting Room W209C	Meeting Room W209DE	Meeting Room W209F	Meeting Room W210	Meeting Room W211
07:30–17:00	Registration								
08:00–10:00	STh1J • Photonic Integration	STh1K • Packaging and New Functionalities in Silicon Photonics	FTh1L • Time Crystals and Temporal Interfaces	FTh1M • Nonlinear Phenomena in Quantum Systems	JTh1N • Symposium: Photonics Meets Free-Electron Science I	STh1O • Widely Tunable Semiconductor Lasers	STh1P • Nonlinear Effects in Metasurfaces	STh1Q • Integrated Photonics for Signal Processing and Communications	FTh1R • Plasmonics and Photonic Structure and Devices
10:00–13:00	**Exhibits Hours, CLEO Hub** Coffee Break: 10:00-11:30 *CLEO Hub sponsored by Thorlabs, Inc.* *Coffee Break Sponsored by IPG Photonics and OZ Optics Limited*								
11:30–13:00	JTh2A • Joint Poster Session III								
13:00–15:00	STh3J • Optical Computing and Theoretical Methods	JTh3K • Symposium: 3-D Horizons in Photonics: Unraveling the Next Frontier of Integrated Circuits I	FTh3L • Applied Nano-Optics and Plasmonics	STh3M • Laser and Light Source Integration I	JTh3N • Symposium: Photonics Meets Free-Electron Science II	ATh3O • Advanced Semiconductor Lasers	STh3P • Nonlinear Metasurfaces and Nanophotonics	STh3Q • Neural Networks and Secure Communications	FTh3R • Single and Entangled Photon Sources and Their Measurement
15:00–15:30	Coffee Break								
15:30–17:30	STh4J • Fiber Fabrication and Characterization Techniques	JTh4K • Symposium: 3-D Horizons in Photonics: Unraveling the Next Frontier of Integrated Circuits II	FTh4L • Topological and Applied Nanophotonics	STh4M • Laser and Light Source Integration II	JTh4N • Symposium: Photonics Meets Free-Electron Science III	STh4O • Highly Coherent Semiconductor Lasers	STh4P • Photonic Crystals	STh4Q • Microwave Photonics Systems and Subsystems	STh4R • Photonic Integrated Solid State Systems
17:30–19:00	Dinner Break (on your own)								
19:00–21:00	JTh5A • Joint Postdeadline Paper Presentations								

Agenda of Sessions — Friday, 10 May

Eastern Daylight Time Zone (EDT)	Meeting Room W201AB	Meeting Room W201CD	Meeting Room W204AB	Meeting Room W205AB	Meeting Room W205CD	Meeting Room W206A	Meeting Room W206B	Meeting Room W207A	Meeting Room W207BC
07:30–14:00	Registration								
08:00–10:00	SF1A • Sensing with Novel Materials	AF1B • Machine Learning and Numerical Simulations for Biophotonics	FF1C • Ultrafast Spectroscopy of Charge Dynamics in Oxides and Nanostructures	AF1D • Optical Metrology and Wavefront Sensing	AF1E • Integrated Photonics and Process Control	AF1F • Time and Robust Precision Clocks	SF1G • Towards Mid-IR and THz Generation	FF1H • Optical Continuous Variable Quantum Information	SF1I • Laser Micro- and Nano-patterning
10:00–10:30	Coffee Break								
10:30–12:30	SF2A • Advanced Sensing Methods	SF2B • Multiphoton Microscopy	FF2C • Ultrafast Studies of Chiral Phenomena and Phonon Dynamics	AF2D • Optical Neural Networks and Applications of Machine Learning	AF2E • Optical Ranging and Spectroscopy	SF2F • Frequency Comb Spectroscopy and Ranging	SF2G • Yb Lasers	FF2H • Progress in Squeezed Light Generation	SF2I • Laser Ablation and Surface Processing
12:30–14:00	Lunch Break (on your own)								
14:00–16:00	SF3A • Environmental Monitoring Methodologies	SF3B • Image-based Techniques	FF3C • Chiral Effects in Nanophotonics and Nano-Optics	SF3D • Optical Fiber Networks and Comb Generation	SF3E • Nonlinear Effects in Semiconductor Lasers		SF3F • Advanced Photonic Integrated Devices	SF3G • Optoelectronic Nanodevices	SF3H • Strong-field Light-matter Interactions

Eastern Daylight Time Zone (EDT)	Meeting Room W207D	Meeting Room W208	Meeting Room W209A	Meeting Room W209B	Meeting Room W209C	Meeting Room W209DE	Meeting Room W209F	Meeting Room W210	Meeting Room W211
07:30–14:00	Registration								
08:00–10:00	FF1J • Control of Absorption & Emission of Radiation	FF1K • Nonlinear Phenomena in Classical and Quantum System	SF1L • Space and Mode Division Multiplexing	SF1M • Large-scale Photonic Integrated Circuits	FF1N • New Concepts in Metamaterials and Complex Media	SF1O • Photonic Multiplexer	SF1P • Mir-coresonators and Applica-tions	SF1Q • Optical Frequency Combs in Fiber Lasers and Resonators	SF1R • Photonics of Low Dimensional Materials I
10:00–10:30	Coffee Break								
10:30–12:30	SF2J • Sensing and Imaging on Chip	FF2K • Nonlinear Quantum Photonics	SF2L • Novel Transmitters and Receivers	SF2M • Photonics for Machine Learning	FF2N • Sub-wavelength Systems and 2D Materials	SF2O • Brillouin Scattering and Spectral Broadening	SF2P • Laser Spectroscopy	SF2Q • Four-wave Mixing and Nonlinear Dynamics in Fiber Systems	SF2R • Photonics of Low Dimensional Materials II
12:30–14:00	Lunch Break (on your own)								
14:00–16:00	AF3I • Novel Technologies for Environmental Sensing	SF3J • Nonlinear Quantum and Topological Photonics	SF3K • Long-haul Commu-nications	SF3L • High Energy and High Intensity Lasers	FF3M • Sub-wavelength Systems and Photonic Crystals		SF3N • Microwave Generation and Timing	SF3O • Laser Sources for Dual-comb Spectroscopy	