

Monday, September 15

9:00 – 9:30	Session 1: Overview of the National Photonics Initiative National Photonics Initiative – Sensors for Energy and the Environment <i>Bob Lieberman, 2014 SPIE Vice President</i>
9:30 – 10:00	Industry Perspectives on the National Photonics Initiative and Photonics for Defense and National Security <i>James Horkovich, Raytheon</i>
10:00 – 10:30	NPI – Telecom <i>Tom Koch, Optical Science Center, University of Arizona</i>
10:30 – 11:00	Coffee Break
	Session 2: Space Applications
11:00 – 11:30	Lasers in Space – Communications and Other Applications <i>Abhijit Biswas, Jet Propulsion Laboratory, Cal Tech</i>
11:30 – 11:45	Concepts and Methods for Space-Time Reference <i>Paul Berceau, Stanford University</i>
11:45 – 12:15	NASA Space Laser Technology <i>Michael Krainak, NASA</i>
12:15 – 12:45	The Lunar Laser Communication Demonstration <i>Don Boroson, MIT Lincoln Lab</i>
12:45 – 1:15	Poster Introductions
1:15 – 2:30	Lunch & Poster Session
	Session 3: Environmental Sensors
2:30 – 3:00	Femtosecond Laser Processing Inside Optical Fibre: Shaping Multi-functional Lab-in-Fibre <i>Peter Herman, University of Toronto</i>
3:00 – 3:15	Laser Driven Fiber Optic Gyroscopes <i>Jacob Chamoun, Stanford University</i>
3:15 – 3:45	Ultra-high Sensitivity of LIGO <i>Brian Lantz, Stanford University</i>
3:45 – 4:00	Sound and Ultrasound Detection Using Optical Fiber Sensors for Biological Applications <i>Wonuk Jo, Stanford University</i>
4:00 – 4:30	Coffee Break
	Session 4: Advanced Optics for 3D Sensors & Displays
4:30 – 5:00	Sub-Wavelength Grating Lenses with a Twist <i>Sonny Vo, Leia</i>
5:00 – 5:30	Augmented Reality Reveals Anatomy within Art <i>Sarah Hegmann, Stanford School of Medicine</i>
5:30 – 6:00	A GPU-accelerated immersive audio-visual framework for interaction with molecular dynamics using consumer depth sensors <i>David Glowacki, University of Bristol</i>
6:00 – 9:00	Reception & Banquet at the Stanford Faculty Club
7:30 – 8:00	Biophotonics, Prometheus, and Pandora: Peering inside the Box <i>Tom Baer, Stanford University</i>

Tuesday, September 16

Session 1: Imaging and Communication in Multimode Fibers	
9:00 – 9:30	Mode-Division Multiplexed Transmission Over Multimode Fibers <i>Roland Ryf, Alcatel-Lucent Bell Laboratories</i>
9:30 – 10:00	Holographic minimally invasive endoscopy for <i>in-vivo</i> applications: new challenges <i>Tomas Cizmar, Dundee University</i>
10:00 – 10:30	Reducing Noise and Enhancing Resolution for Endoscopic Imaging through Multi-Mode Optical Fiber <i>Ruo Yu Gu</i>
10:30 – 11:00	Coffee Break
Session 2: LEDs for Communications & Displays	
11:00 – 11:30	GaN-on-GaN Full Visible Spectrum LED Technology <i>Mike Krames, Sora</i>
11:30 – 12:00	Group IV Optoelectronic Materials and Devices for Communications <i>Yijie Huo, Stanford University</i>
12:00 – 12:30	Wide Color Gamut Display Technology <i>Nathan Gardner, Glo AB</i>
12:30 – 2:00	Lunch & Poster Session
Session 3: Novel Solar Energy Technologies	
2:00 – 2:30	High Performance Next Generation Thin Film Solar Cells <i>Qi Chen, UCLA</i>
2:30 – 2:45	High Performance Metal Nanowire Transparent Electrodes <i>Po-Chun Hsu, Stanford University</i>
2:45 – 3:15	Passive Photonic Radiative Cooling <i>Aaswath Raman, Stanford University</i>
3:15 – 3:30	Light Trapping in Solar Cells <i>Ken Wang, Stanford University</i>
3:30 – 4:00	Coffee Break
Session 4: Optogenetics	
4:00 – 4:30	Single cell in situ transcriptional profiling by sequential FISH <i>Long Cai, Cal Tech</i>
4:30 – 5:00	Toward Deciphering Neural Codes with Engineered Optical Voltage Sensors <i>Yiyang Gong, Stanford University</i>

Wednesday, September 17

	Session 1: Coherent and Ultrafast Electron Optics
9:00 – 9:30	Coherent Electron Control <i>Herman Batelaan, University of Nebraska, Lincoln</i>
9:30 – 9:45	Laser Acceleration and Deflection of Electrons with a Silicon Dielectric Structure <i>Ken Leedle, Stanford University</i>
9:45 – 10:15	Cool Beams for Ultrafast Electron Imaging <i>Jom Luiten, Eindhoven University of Technology</i>
10:15 – 10:30	Ultrafast and Coherent Control of Electrons <i>Thomas Juffmann, Stanford University</i>
10:30 – 11:00	Coffee Break
	Session 2: Attosecond Science
11:00 – 11:30	Applications of Tabletop Coherent EUV and Soft X-Ray Sources <i>Henry Kapteyn, University of Colorado</i>
11:30 – 11:45	Attosecond FEL Pulses <i>Gabriel Marcus, SLAC</i>
11:45 – 12:15	Extreme Ultraviolet Frequency Combs <i>Tom Allison, Stony Brook University</i>
12:15 – 12:30	High Harmonic Generation in Solid Argon <i>Georges Ndabashimiye, Stanford University</i>
12:30 – 2:00	Lunch