

2020 Laser and Optical Physics Portfolio Review

Dr. William P. Roach | May 26-29, 2020 | Virtual

Agenda Day 1 | May 26, 2020

Time	Topic	Speaker
0830-0850	Registration	
0850-0900	Introduction	Col. Jason B Mello, AFOSR
0900-0930	Talk 1 – Title Not Available	Dr. Marko Loncar Harvard
0930-1000	Fundamental Study on Catastrophic Optical Damage for Quantum Cascade Lasers	Dr. Arkadiy Lyakh University of Central Florida
1000-1030	The Extended-Range Comprehensive Atmospheric Optics Sensing (ERCAOS) Experimental Campaign: Overview	Dr. Mikhail Vorontsov University of Dayton
1030-1045	BREAK	
1045-1115	Brightness Scaling in $\lambda > 2.5\mu\text{m}$ Quantum Well Lasers	Dr. Chi Yang Air Force Research Laboratory
1115-1145	Investigation of Energy Transfer Processes in Bi/Yb/Er co-doped Glasses for Enhancement of Luminescence from Bismuth and Erbium	Dr. Leanne Henry Air Force Research Laboratory
1145-1145	Multiscale and Multiphysics Simulation of Electronic and Thermal Transport in Quantum Cascade Lasers	Dr. Irena Knezevic University of Wisconsin-Madison
1145-1245	OPEN	
1245-1330	LUNCH	
1330-1400	Waveguide Lasers in the Visible and Ultraviolet	Dr. J. Gary Eden University of Illinois
1400-1430	Fiber sources using intermodal nonlinearities	Dr. Siddharth Ramachandran Boston University
1430-1500	Studies in Raman Compression	Nathaniel Fisch Princeton University
1500-1515	BREAK	
1515-1545	Talk 9 – OPEN	
1545-1615	Self-winding Helices as Slow-wave Structures for mm and sub-mm Traveling-Wave Tubes	Dr. Francesca Cavallo University of New Mexico
1615-1645	Nonreciprocal Photonics for Suppression of Disorder Induced Scattering	Dr. Gaurav Bahl

		University of Illinois at Urbana-Champaign
1645-1700	Adjourn with Final Remarks	Dr. William P. Roach
1700-1715	Reviewer Caucus	

		
Agenda Day 2 May 27, 2020		
Time	Topic	Speaker
0830-0850	Registration	
0850-0900	Introduction	Dr. William P. Roach, AFOSR
0900-0930	THz Photonics in Water & Beyond	Dr. Xi-Cheng Zhang University of Rochester
0930-1000	Talk 2 - OPEN	
1000-1030	Heteroepitaxy of Orientation-Patterned Nonlinear Optical Materials	Dr. Vladimir Tassev Air Force Research Laboratory, Sensors Directorate, RYDH
1030-1045	BREAK	
1045-1115	Iron Fiber Laser Project	Dr. Kenneth Schepler CREOL, University of Central Florida
1115-1145	High Power 2 Micron Fiber Amplifiers for Directed Energy and Mid-IR Conversion	Dr. Angel Flores Air Force Research Laboratory
1145-1215	Narrow-linewidth Brillouin Laser Source Based on Chalcogenide Resonators in the Mid-infrared Region	Dr. Wounghang Park University of Colorado
1215-1245	Low-dimensional Materials for High-efficiency/high-power Nonlinear Optical Applications in the Infrared	Dr. Mercouri Kanatzidis Northwestern University
1245-1330	LUNCH	
1330-1400	Multi-disciplinary Approaches to Radiation Balanced Lasers: <i>Rare-Earths and</i>	Dr. Mansoor Sheik-Bahae UNM

	<i>Semiconductors in Disks, Fibers, and Microstructures</i>	
1400-1430	Development of Anti-Resonant Hollow Core Fiber for High Power and Mid-wave Infrared Transmission	Dr. Amy Van Newkirk Penn State University
1430-1500	Extreme "Meta"-Optical Fiber Enabled by Gate-tunable Metasurfaces and Zero- index Materials	Dr. Howard Lee Baylor University
1500-1515	BREAK	
1515-1545	COE on Zinc Selenide Fiber Infrared Sources	Dr. Venkatraman Gopalan Penn State
1545-1615	Scaling the Output Power of Monolithic Phase-Locked Arrays of Quantum Cascade Lasers	Dr. Luke Mawst University of Wisconsin-Madison
1615-1645	Distributed Sidewall Loss Method to Control Mode Selection in Broad Area Quantum Cascade Lasers	Dr. Ron Kaspi AFRL
1645-1700	Adjourn with Final Remarks	Dr. William P. Roach
1700-1716	Reviewer Caucus	