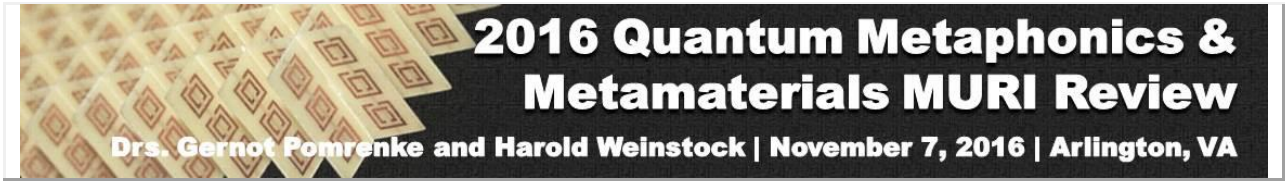

Basic Research Innovation and Collaboration Center (BRICC)
4075 Wilson Blvd., Suite 350 | Liberty Room
Arlington, VA 22203

Agenda Day 1 | Monday, November 7, 2016

Time	Title	Speaker
0730-0800	**Registration**	
0800-1200	**QUANTUM METAPHOTONICS & METAMATERIALS MURI REVIEW**	
0800-0815	Opening Remarks	Dr. Harold Weinstock and Dr. Gernot Pomrenke, AFOSR
0815-0830	Introduction and Overview of MURI Activities	Prof. Rashid Zia, Brown
0830-0830	Active and Magnetic Metaphotonic Structures	Prof. Harry Atwater, Caltech
0850-0900	Optical Magnetism in Metallic and Dielectric Metamaterials	Georgia Papadakis, Caltech
0900-0920	Plasmon Mediated Fluorescent Decay in Two-dimensional Molecular Aggregates	Prof. Nicholas Fang, MIT
0920-0940	Photon-photon Interaction Mediated by Systems with Multiple Ground States	Prof. Shanhui Fan, Stanford
0940-1000	Cavity QED with Inverse Designed Meta-cavities	Prof. Jelena Vuckovic, Stanford
1000-1020	**Morning Coffee and Discussion Break**	
1020-1040	Salient Features of Low-Index Photonics	Prof. Nader Engheta, U Penn
1040-1040	Metasurface Quantum Engineering	Prof. Xiang Zhang, UC Berkeley
1100-1120	Achieving Directional Emission with Dielectric Antennas	Prof. Mark Brongersma, Stanford
1120-1140	Emerging Materials Capabilities	Prof. Seth Bank, UT Austin
1140-1200	Computational Methods for Qubit Discovery and Exploitation	Prof. Rashid Zia, Brown
1200	**Quantum Metaphotonics & Metamaterials MURI Review Concluded**	
1200-1300	**LUNCH**	

1300-1700	**ARMY'S METAMATERIAL REVIEW**	
1300-1330	Nonlinear Llight-matter Iinteractions in Engineered Optical Media	Prof. Natasha Litchinitser University of Buffalo
1330-1350	Orbital Angular Momentum Microlaser	Prof. Liang Feng University of Buffalo
1350-1410	(Micro)Rectenna Arrays and Nano-enhanced Photovoltaics as Metadevices	Dr. Richard Osgood NSRDEC
1410-1430	Interface and Surface Ferroplasmons in Ag-transition Metal Bimaterial Nanostructures	Prof. Ramki Kalyanaraman University of Tennessee at Knoxville
1430-1450	Control of Light-matter Interaction with Metamaterials	Prof. Mikhail Noginov Norfolk State University
1450-1520	**BREAK**	
1520-1540	From Passive to Active, Time-varying Metasurfaces	Prof. Vladimir Shalaev Purdue
1540-1600	Negatively Spatially Dispersive Metamaterials: Extraordinary Transients in the Parametric Amplification and Nonlinear Reflectivity	Prof. Alex Popov Purdue
1600-1620	Quantum and Nonlinear Optics in Nonlocal Nanowire Metamaterials	Prof. Viktor Podolskiy University of Massachusetts
1620-1640	Study on High Permeability Flexible Metamaterial Structures with Very Small Thickness	Dr. Amir Zaghloul ARL
1700	**MEETING ADJOURNED FOR THE DAY**	

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Agenda Day 2 – Tuesday, November 8, 2016

Time	Title	Speaker
0730-0800	**Registration**	
NAVY'S METAMMATERIALS PROGRAM REVIEW		
0800-0815	Introduction of ONR Metamaterials Program	Mark Spector ONR
0815-0845	Spoof and Hybrid Spoof Metamaterials in the SWIR Spectral Region	Joe Tischler Naval Research Laboratory
0845-0915	Dielectric Metamaterials with Low Loss and Tunability	Costas Soukoulis Iowa State University
0915-1000	Time-Modulated Optical Gradient Metasurfaces	Andrea Alù University of Texas at Austin Ewold Verhagen FOM Institute AMOLF
1000-1015	**BREAK**	
1015-1045	Dielectric Based Optical Metamaterials	Jason Valentine Vanderbilt University
1045-1110	Chalcogenide Thin Films for Meta-Structures Operating in the MWIR	Jesse Franz Naval Research Laboratory
1110-1135	Design of Chalcogenide Meta-Structures for MWIR	Natalia Litchinitser SUNY Buffalo
1135-1200	Reconfigurable Metamaterials at Infrared Frequencies	Yongmin Liu Northeastern University
1200-1300	**LUNCH**	
1300-1330	Metasurfaces with Electric, Magnetic, and Magneto-electric Responses	Anthony Grbic University of Michigan
1330-1355	Generation and Separation of Pure Optical Vortex Beams with Plasmonic Metasurfaces	Xiaodong Yang Missouri University of Science and Technology
1355-1425	Tunable and Reconfigurable Infrared Metamaterials	Gennady Shvets Cornell University
1425-1455	Pushing the Limits of Imaging with Metamaterial Lenses and Plasmon Injection Scheme	Durdu Guney Michigan Technological University

1455-1510	**BREAK**	
1510-1540	Acoustic Surface Effects of Bistable, Negative-Stiffness Elements	Greg Orris Naval Research Laboratory
1540-1630	Expanding the Limits of Acoustic Metamaterials	Steve Cummer Duke University
1630-1700	“Filtered” Near-field Thermal Radiation: Isolating Surface Phonon Polariton Resonances in Near-field Radiative Transfer	Arvind Narayanaswamy Columbia University
1700	**MEETING ADJOURNED FOR THE DAY**	

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Agenda Day 3 | Wednesday, November 9, 2016

Time	Title	Speaker
0730-0745	**Registration**	
AFOSR METAMATERIALS PROGRAM REVIEW		
0745-0750	Introduction AFOSR POs: Jason Marshall, Arje Nachman, Gernot Pomrenke and Harold Weinstock sponsors of research being reported	Harold Weinstock, AFOSR
0750-0805	Fascinating Nonlinear Interactions in Metamaterials	Andrea Alu, UT-Austin
0820-0835	Anisotropic Impedance Surfaces for Control of Surface Wave Propagation and Scattering	Daniel Sievenpiper, UCSD
0835-0850	Reflective Photonic Limiters for Sensor Protection from High Power Laser Radiation	Ilya Vitebskiy and Nicholaos Limberopoulos, AFRL/RYDP
0850-0920	Extreme Platforms for Extreme Manipulation of Fields and Waves	Nader Engheta, Penn
0920-0935	Photonics-Driven, Optically-Coherent Networks for Meta-Surface-Current Sheets as RF Array Antennas	Dennis Prather, Delaware
0935-0950	Wave Engineering with Metasurfaces Nanoantennas	Hossein Mosallaei, Northeastern
0950-1020	**BREAK**	
1020-1035	Chiral Nanophotonic Metadevices and Metasurface MURI	Reza Khorasaninejad and Federico Capasso, Harvard
1035-1050	Device Applications of Metafilms and Metasurfaces	Mark Brongersma, Stanford
1050-1105	On-Chip Nanophotonics with CMOS-Compatible Plasmonic Materials	Alexandra Boltasseva, Purdue
1105-1120	Tailoring Radiative Processes by Nanoengineering for Ultrafast Optoelectronics	Maiken Mikkelsen, Duke
1120-1135	Tuning Chiroptical Response in Optical Metamaterials	Vivian Ferry, Minnesota
1135-1150	Coupling of Gap Plasmon–ENZ Modes Structured Surfaces for Perfect Absorbers,	Joshua Hendrickson, AFRL/RYDH

	Filters and Detectors	Justin Cleary, RYDH
1150-1250	PECASE: Parity-Time Symmetric Nanophotonic Materials and Metamaterials	Brian Baum and Jennifer Dionne, Stanford
1250-1305	**LUNCH**	
1305-1335	Dispersion Engineering Using Metamaterials for Transformational Electromagnetics FY12 MURI	Edl Schamiloglu, UNM
1335-1350	Pulsed Laser Deposition of Multiferroic Complex Oxide Superlattices	John Jones and Gail Brown, AFRL/RXAN
1350-1405	Tailoring Magnetic Nanomaterials for Electromagnetic Wave Absorption	Chao Wang, Johns Hopkins
1405-1420	Transport Property Studies of Structurally Modified Graphene	Qing Hao, Arizona
1420-1435	Investigation of Design, Additive Manufacturing and Applications of Electromagnetic Metamaterials	Hao Xin, Arizona
1435-1450	Visible Light Metasurfaces Based on Single Crystal Silicon	Jon Fan, Stanford
1450-1505	Widely Tunable Semiconductor Antennas for Reconfigurable Metasurfaces	Jon Schuller, UCSB
1505-1535	**BREAK**	
1535-1550	Toward Active Circuits and Metamaterials Utilizing Bandgap-Less Hydrodynamic Gain from Ultra-Slow 2D Plasmons	Donhee Ham, Harvard
1550-1605	Polaritonic Metamaterials Based on van der Waals Heterostructures	Dmitri N. Basov, Columbia
1610-1625	Compressive Sensing and Enhanced Detectors with Plasmonics and Photonic Nanojets	Augustine Urbas, AFRL/RXAP
1625-1655	Film-Coupled NanoPatch Platform for Novel Apertures at Infrared and Visible Wavelengths	David R. Smith, Duke
0745-1655	Posters (All Day)	
	Tailoring Radiative Processes by Nanoengineering for Ultrafast Optoelectronics	Maiken Mikkelsen, Duke
	Atomic Layered Two Dimensional Materials-based Metasurfaces for Terahertz Modulators	Thomas A. Searles, Howard
	Design and Fabrication of Metasurface Lenses in Midwave Infrared	Bryan Adomanis, AFIT, D. Bruce Burckel, Sandia, and Michael Marciniak, AFIT
	Metasurface Absorbers for Multispectral Pixel Arrays	Jon W. Stewart and Maiken H. Mikkelsen, Duke
	Compact Chip-based Hybrid Plasmonics	Artur Davoyan and Harry Atwater, CalTech
	Reflective Photonic Limiters for Sensor Protection from High Power Laser Radiation	Nicholaos Limberopoulos, AFRL/RYDP and Ilya Vitebskiy, AFRL/RYDP

1655	**MEETING ADJOURNED**