



Basic Research Innovation Collaboration Center (BRICC)
 900 North Glebe Road, 2nd Floor- East West Falls Church Room
 Arlington, VA 22203

AGENDA - Day 1 – September 4, 2013

Time	Title of Project	Speaker
0730-0800	Registration	
0800-0805	Welcome/Introduction	Arje Nachman Air Force Office of Scientific Research
0805-0850	MURI Project Overview: Goals, Team, Challenges	Jerry Moloney University of Arizona
0850-0920	From Ionized Atoms to a Collective Plasma State: A Microscopic Approach	Stephan Koch Philipps University, Marburg
0920-0950	Self-Focusing and Plasma Formation Dynamics	Richard Albanese ADED Company
0950-1020	Light-Matter Interactions and Coherent Quantum Effects in Nonlinear Optics: Re-thinking the Notion of Susceptibility at Ultrafast Scale	Miroslav Kolesik University of Arizona
1020-1050	BREAK	
1050-1120	Experiments on Two-beam Laser Filamentation in Air	Pavel Polynkin University of Arizona
1120-1150	Filament Induced Optical and Microwave Transmission	Demetrios Christodoulides CREOL-College of Optics and Photonics
1150-1220	Numerical Simulation of Strong-Field Processes and its Application to Laser Pulse Filamentation	Agnieszka Jaron-Becker University of Colorado
1220-1330	LUNCH	
1330-1400	Higher Order Nonlinearities in Laser Filamentation	Robert Levis, Temple University
1400-1430	Influence of Nonlinear Laser Beam Propagation on High Harmonic Generation from the UV to the keV	Margaret Murnane University of Colorado
1430-1500	Control and Characterization of Long Range Focusing of Ultrashort Pulses for High Intensity Beam Delivery	Charles Durfee Colorado School of Mines
1500-1530	BREAK	
1530-1600	Filamentation at High Pressures	Alex Gaeta Cornell University
1600-1630	Ultra-short Pulse Laser Research at AFRL: Update on Propagation Modeling and Filament Experiments	Andreas Schmitt-Sody AFRL
1630	MEETING ADJOURN FOR THE DAY	

AGENDA - Day 2 – September 5, 2013

0725-0755	Registration	
0755-0800	Introduction	Dr. Arje Nachman AFOSR
0800-0830	Part 1: High Power Single Mode and Ultrafast Pulsed VECSELS Part 2: Simulation Studies of Pump-probe, Raman-mediated Femtosecond Pulse Conversion	Dr. Jerome Moloney University of Arizona
0830-0900	Extremum-Seeking Control of a Mode-Locked Laser	Dr. Nathan Kutz University of Washington
0900-0930		Dr. Jason Fleischer Princeton
0930-1000	Deformations, Localized Edge States and Associated Pulse Dynamics in Optical Honeycomb Lattices	Dr. Mark Ablowitz University of Colorado
1000-1030	BREAK	
1030-1100	Specially Designed Accelerating Beams and their Possible Applications	Dr. Zhigang Chen San Francisco State University
1100-1130	Progress of Nonlinear Optics in Periodic Media	Dr. Jianke Yang University of Vermont
1130-1200	Modulation of Long-Cavity Semiconductor Lasers	Dr. Nicholas Usechak AFRL
1200-1300	LUNCH	
1300-1330	Full Wave Hot Electron Transport for 3D Simulation of High Frequency Semiconductor Devices	Dr. Mathew Grupen AFRL
1330-1400	Transient Stimulated Brillouin Scattering in Kilowatt Class Fiber Lasers Seeded with Phase Modulated Light	Dr. Iyad Dajani AFRL
1400-1430	How to Control the Coupling between a Quantum Dot and a Launched Surface-plasmon-polariton Wave	Dr. Danhong Huang AFRL
1430-1500	Analytical Description of Externally-Coupled Laser Arrays Operating in Stable, Multi-Stable and Chaotic Regimes	Dr. Erik Bochove AFRL
1500-1530	BREAK	
1530-1600	Nonlinear Optics in Negative-index Materials: Extraordinary Features, (meta)Materials and Applications	Dr. Alexander Popov Univ of Wisconsin/Stevens Point
1600-1630	Nonlinear Optics in Multimode Optical Fibers	Dr. Arash Mafi Univ of Wisconsin/Milwaukee
1630-1700	The Effective Behaviors of Thermoelectric Composites	Dr. Jiangyu Li University of Washington
1700	MEETING ADJOURN	