

# 2018 Annual Review of Theoretical NLO Contractors

Dr. Arje Nachman | March 7, 2018 | Arlington, VA

Basic Research Innovation and Collaboration Center (BRICC)  
**New Temporary Location:** 900 N Glebe Road, 2<sup>nd</sup> Floor | Ballston Room  
 Arlington, VA 22203

## Agenda | March 7, 2018

Time	Title	Speaker
0730-0755	<b>Registration</b>	
0755-0800	Welcome/Introduction	<b>Arje Nachman</b> AFOSR
0800-0830	<a href="#">Ultrashort LWIR TeraWatt Pulse Atmospheric Propagation and Interactions with Interfaces</a>	<b>Jerry Moloney</b> University of Arizona
0830-0900	<a href="#">Nonequilibrium Semiconductor Dynamics: From Semiconductor-Bloch to Dirac-Bloch Equations</a>	<b>Stephan Koch</b> Philipps University, Marburg
0900-0930	<a href="#">Non-Hermitian Methods for Optical Response at High Intensities</a>	<b>Miroslav Kolesik</b> University of Arizona
0930-1000	<b>BREAK</b>	
1000-1030	<a href="#">Simulating Electron Trap Dynamics in High Performance Electronic Devices</a>	<b>Matt Grupen</b> AFRL/RV
1030-1100	<a href="#">Chaos in Dirac Electron Optics: Emergence of a Relativistic Quantum Chimera</a>	<b>Ying-Cheng Lai</b> Arizona State University
1100-1130	<a href="#">Generalization of PT Symmetry in Optics</a>	<b>Jianke Yang</b> University of Vermont
1130-1300	<b>LUNCH</b>	
1300-1330	<a href="#">Tight-binding Models for Longitudinally Driven Linear/nonlinear Photonic Lattices</a>	<b>Mark Ablowitz</b> University of Colorado
1330-1400	<a href="#">Improvements in the Phase Noise and Tuning of an Optically Injected Semiconductor Laser with Opto-Electronic Feedback</a>	<b>Nicholas Usechak</b> AFRL/RV
1400-1430	Nonlinear and Quantum-assisted Phase Retrieval	<b>Jason Fleischer</b> Princeton University
1430-1500	Novel Effects in Ultrafast Nonlinear Optical Response of Wide-band-gap Solids Due to Non-perturbative, Non-monochromatic Modifications of Band Structure by Few-cycle High-intensity Laser Pulses	<b>Vitaly Gruzdev</b> University of Missouri
1500-1530	<a href="#">Nonlinear Optics at the Nanoscale</a>	<b>Maxim Sukharev</b> Arizona State University
1530	<b>MEETING ADJOURN</b>	