

# 2023 Review of NLO Basic Research

Dr. Arje Nachman | March 1, 2023 | Arlington, VA -hybrid

## Agenda | March 1, 2022

Time	Title	Speaker
0800-0830	Zoom Login / In-person check-in	
0830-0900	Topological Quantum Chemistry Methods for Photonic Crystals	<b>Barry Bradlyn</b> Illinois
0900-0930	Extreme Nonlinear Optics Research in Solids and Gases – Theory and Experiment	<b>Jerry Moloney</b> University of Arizona
0930-1000	Optical Simulation of Spin Hamiltonians for Unconventional Computing	<b>Mohammad-Ali Miri</b> CUNY
1000-1030	<b>BREAK</b>	
1030-1100	Presentation Title: Nonlinear RF Modeling of GaN HEMTs with Fermi Kinetics Transport and the ASM-HEMT Compact Model	<b>Nicholas Miller</b> AFRL/RV
1100-1130	The Interplay between Non-Hermiticity and Topological Effects	<b>Hamidreza Ramezani</b> Univ Texas Rio Grande Valley
1130-1200	Nonlinear Optics at Plasmonic Interfaces: Multiscale Simulations	<b>Maxim Sukharev</b> Arizona State University
1200-1330	<b>LUNCH</b>	
1330-1400	Topological Dynamics in Magneto-optical Honeycomb Lattices	<b>Mark Ablowitz</b> University of Colorado
1400-1430	Self-Consistent Theory for Field & Carrier Quantum Kinetics --- Application to High-Temperature, High-Density & Fast-Moving Electron-Ion Plasmas	<b>Danhong Huang</b> AFRL/RV
1430-1500	Recent Numerical Modeling Results for Ultra Short Pulse Laser RF and THz Generation, and Particle Beam Interactions with Solid Matter Targets	<b>Travis Garrett</b> AFRL/RD
1500-1530	Full-Brillouin-zone Calculation of High-order Harmonic Generation from Solid-state Media	<b>Miroslav Kolesik</b> University of Arizona
1530-1600	Nonlinear Metasurfaces	<b>Andrea Alu</b> CUNY
1600	<b>MEETING ADJOURN</b>	