

2024 Annual Review of Theoretical NLO Basic Research

Dr. Arje Nachman | March 6, 2024 | Arlington, VA -hybrid

Basic Research Innovation Collaboration Center (BRICC)
4100 N Fairfax Drive, Suite 450 | Arlington, VA 22203

Agenda | March 6, 2024

Time	Topic	Speaker
0800-0830	Zoom Login / In-person check-in	
0830-0900	Stable Real Space Invariants and Their Applications	Barry Bradlyn University of Illinois
0900-0930	Extreme Nonlinear and Nonequilibrium Interactions in Solids and Gases	Jerry Moloney University of Arizona
0930-1000	Universal Programmable Linear Photonic Integrated Circuits for Analog Information Processing in Real-Time	Mohammad-Ali Miri CUNY
1000-1030	BREAK	
1030-1100	Nanoscale Device TCAD Methods for Simulations Accurate from DC Through Terahertz Frequencies	Matthew Grupen AFRL/RV
1100-1130	Physics-Based Design of Laser Ring Arrays - Thermal Effects and Optical Angular Momentum Generation	Catalin Badescu AFRL/RV
1130-1200	Developing quantitative multiscale models for nonlinear molecular plasmonics	Maxim Sukharev Arizona State University
1200-1230	Localized modes in nonlinear lattices and stability of traveling wave solutions in a continuum model	Andrew Hofstrand NYIT
1230-1330	LUNCH	
1330-1400	Dynamics of Interfacial Topological Waves in Photonic Waveguides	Mark Ablowitz University of Colorado
1400-1430	Self-Consistent Quantum-Kinetic Equations for Coupled Drifting Electrons and Driven Phonons in Nanowire Systems	Danhong Huang AFRL/RV
1430-1500	Plasma Wake Driven, Ponderomotive Force Driven, and Topological Surface Plasmon Polaritons	Travis Garrett AFRL/RD
1500-1530	Strong light-matter interactions in bulk and structured materials	Miroslav Kolesik University of Arizona
1530-1600	Nonlinear Metasurfaces	Andrea Alu CUNY
1600-1630	Data-driven approximation of topological insulators	Justin Cole UCCS
1630	MEETING ADJOURN	