

2020 Annual Review of Electromagnetics Portfolio Subarea Theoretical Nonlinear

Dr. Arje Nachman | March 3, 2020 | Arlington, VA

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

Agenda | March 3, 2020

Time	Title	Speaker
0800-0830	Welcome/Introduction	Arje Nachman AFOSR
0830-0900	Long Wavelength Extreme Nonlinear Optics: From Singular Subwavelength Extreme Gradients to Plasma-less Shattering of Water Droplets	Jerry Moloney University of Arizona
0900-0930	Extreme nonlinear optics in semiconductors and TMDCs	Stephan Koch University of Arizona
0930-1000	Nonlinear Electrodynamics at Exciton-plasmon Interfaces	Maxim Sukharev Arizona State University
1000-1030	BREAK	
1030-1100	Non-Hermitian Approaches to Atoms, Molecules and Nanostructures in Strong Fields	Miroslav Kolesik University of Arizona
1100-1130	FKT/DVSI Simulation of 'Load Pull' for Amplifier Design	Matt Grupen AFRL/RV
1130-1200	Machine Learning Based Inverse Design of Graphene Scattering Systems and GPS Antijamming	Ying-Cheng Lai Arizona State University
1200-1330	LUNCH	
1330-1400	Progress of Nonlinear Optics with PT Symmetry	Jianke Yang University of Vermont
1400-1430	Topological Insulators in Magneto-Optic Lattices	Mark Ablowitz University of Colorado
1430-1500	Defect Charging Dynamics and Effects on Magneto-Transport of Electrons in Quantum Wells	Danhong Huang AFRL/RV
1500-1530	Floquet Chern Insulator of Light	Bo Zhen University of Pennsylvania
1530-1600	Generation of RF Radiation by Femtosecond Scale Atmospheric Filaments	Michael White AFRL/RD
1600	MEETING ADJOURN	