

 2024 Electromagnetics Annual Portfolio Review Dr. Arje Nachman January 9-11, 2024 Arlington, VA - hybrid		
Basic Research Innovation Center (BRICC) 4100 N Fairfax Drive Suite 450 Arlington, VA 22203		
Agenda Day 1 Tuesday, January 9, 2024		
Time	Title	Speaker
0800-0830	Zoom Login	
0830-0900	Hyperbolic Surface Waves	Andrea Alu CUNY
0900-0930	Super-Resolution Imaging Using PSF Phase Information	Jason Fleischer Princeton
0930-1000	Electromagnetic Inverse Wave Scattering in Anisotropic Media Via Reduced Order Modeling	Liliana Borcea University of Michigan
1000-1030	BREAK	
1030-1100	Supergain Helical Antennas	Arthur Yaghjian S4, Inc
1100-1130	Scaling Theory of Microwave Absorption in Amorphous and Granular Ferromagnets	Eugene Chudnovsky CUNY Lehman College
1130-1300	LUNCH	
1300-1330	Coherence-Based Off-Axis Detection of Pulsed Laser Radiation. Evaluation of Signal-To-Noise Ratio	Elizabeth Bleszynski Monopole Research
1330-1400	Control of Light Propagation in Dispersive Media with Spectral Singularities	Ilya Vitebskiy AFRL/RV
1400-1430	BREAK	
1430-1500	Leveraging Kernel Design for Coherent Change Detection	Anne Gelb Dartmouth College
1500-1530	Sampling and Frame Expansions for Ultra-Wide-Band Signals	Stephen Casey American University
1530-1600		
1600-1630		
1630-1700		
1700	ADJOURN FOR THE DAY	



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Agenda Day 2
Wednesday, January 10, 2024

Time	Title	Speaker
0800-0830	Zoom Login	
0830-0900	Circular Partially Coherent Beams in Turbulence	Greg Gbur UNCC
0900-0930	SAR Imaging of Dispersive Targets	Arnold Kim UC/Merced
0930-1000	Modeling the Earth's Ionosphere by a Phase Screen for the Analysis of Transionospheric SAR Imaging	Semyon Tsynkov NCSU
1000-1030	BREAK	
1030-1100	Phaseless Multi-static SAR Imaging via Illumination Diversity and Non-convex Optimization	Birsen Yazici RPI
1100-1130	New Results on the Reduced Order Modeling Inversion of SAR Data in Multi-Scattering Environment	Vladimir Druskin WPI
1130-1300	LUNCH	
1300-1330	Path to Discovery of New Topological Structures, and Machine Learning for Scattering Control	Daniel Sievenpiper UCSD
1330-1400	Wave Probing Through Rough Interfaces	Knut Solna UC/Irvine
1400-1430	BREAK	
1430-1500	Vectorial Propagation Governed by the 3D Stochastic Maxwell Vector Wave Equation in Stratified Layers	Alex Mahalov Arizona State Univ
1500-1530	Detection-based Synthetic-Aperture Passive Source Localization	Margaret Cheney Colorado State University
1530-1600	Fast Simulation and Inverse Design of Nanophotonic and Radio-Frequency Devices using Boundary Integral Equation Methods	Constantine Sideris USC
1600-1630		
1630-1700		
1700	ADJOURN FOR THE DAY	



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Agenda Day 3 Thursday, January 11, 2024

Time	Title	Speaker
0800-0830	Registration	
0830-0900	The Linear Sampling Method for Inverse Electromagnetic Scattering	Peter Monk University of Delaware
0900-0930	Using Time-Varying Systems to Challenge Fundamental Limitations in Electromagnetics and Photonics	Francesco Monticone Cornell
0930-1000	Planar Grating Geometries Illuminated by Sources of Finite Extent	Thorkild Hansen S4, Inc
1000-1030	BREAK	
1030-1100	A Numerical Functional Calculus with Applications to Optical Wave Propagation	Max Cubillos-Moraga AFRL/RD
1100-1130	Group Invariant Solutions of Maxwell's Equations Exhibiting Constructive/Destructive Interference	Richard James University of Minnesota
1130-1300	LUNCH	
1300-1330	Intermodal Excitation in Time-Varying Electromagnetic Structures	Alessandro Salandrino University of Kansas
1330-1400	Shallow Recurrent Decoders (SHRED) for Model Reduction and Sensing	Nathan Kutz University of Washington
1400-1430	BREAK	
1430-1500	Singularity Engineering by Meta-optics	Federico Capasso Harvard
1500-1530	Electromagnetic Design via QCQP's and Convex Optimization	Owen Miller Yale
1530-1600	Families of Empirical Wavelet Frames	Jerome Gilles San Diego State University
1600-1630		
1630-1700		
1700	MEETING ADJOURNED	