

 <h1>2025 Electromagnetics Portfolio Review</h1> <p>Dr. Arje Nachman January 7-9, 2025 Arlington, VA - hybrid</p>		
Basic Research Innovation Center (BRICC) 4100 N Fairfax Drive Suite 450 Arlington, VA 22203		
Agenda Day 1 Tuesday, January 7, 2025		
Time	Title	Speaker
0800-0830	Zoom Login	
0830-0900	A Novel Approach to Imaging Moving Targets in Complex Stationary Scenes	Liliana Borcea University of Michigan
0900-0930	Stereo Tomography of Optical Turbulence	Jason Fleischer Princeton
0930-1000	Evaluation of Resonances via Adaptivity and Rational Approximation, and Other Frequency- and Time-Domain Scattering Problems	Oscar Bruno Caltech
1000-1030	BREAK	
1030-1100	A Case Study of Magnetic Navigation	Ying-Cheng Lai Arizona State
1100-1130	Random Magnets as Microwave Absorbers: Dynamical Scaling and Coherent Anisotropy	Eugene Chudnovsky CUNY Lehman College
1130-1230	LUNCH	
1230-1300	Time Metamaterials	Andrea Alu CUNY
1300-1330	Aspects of Off-Axis Laser Radiation Detection: Investigating Effects of Atmospheric Turbulence	Elizabeth Bleszynski Monopole Research
1330-1400	Wave propagation in 1D and 2D periodic arrays with spectral singularities	Ilya Vitebskiy AFRL/Ry
1400-1430	BREAK	
1430-1500	Entropy Stable Conservative Flux Form Neural Networks	Anne Gelb Dartmouth College
1500-1530	Bounds and Optimal Performance in Linear Electromagnetic Systems	Owen Miller Yale
1530-1600	Nonlocal Metasurfaces for Control of Light Beyond the Generalized Snell's Law	Adam Overvig Stevens Institute
1600	ADJOURN FOR THE DAY	



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

**Agenda Day 2
Wednesday, January 8, 2025**

Time	Title	Speaker
0800-0830	Zoom Login	
0830-0900	Deterministic Singularities in Partially Coherent Vortex Beams	Greg Gbur UNCC
0900-0930	Site-Specific Imaging and Spectral Classification of Subsurface Targets	Arnold Kim UC/Merced
0930-1000	Comparative Analysis of Performance for Optimization-Based Transionospheric SAR Autofocus	Semyon Tsynkov NCSU
1000-1030	BREAK	
1030-1100	Super-Resolution SAR Ground Moving Target Imaging	Birsen Yazici RPI
1100-1130	Further Advances of the Lippmann-Schwinger-Lanczos Algorithm for SAR Imaging in Presence of Multiple Scattering and Losses	Vladimir Druskin WPI
1130-1230	LUNCH	
1230-1300	Fast Solvers and Inverse Design Algorithms for Nanophotonic and Radio-Frequency Devices	Constantine Sideris USC
1300-1330	Fundamental Analyses and Discovery of Topological EM Materials	Daniel Sievenpiper UCSD
1330-1400	Synthetic-Aperture Passive Source Localization	Margaret Cheney Colorado State University
1400-1430	BREAK	
1430-1500	Subspace Version of Wilks'-Lambda Test and Application to Space-Time Adaptive Processing	Ram Raghavan AFRL/RY
1500-1530	Computing Topological Invariants for 3D Photonic Crystals	Barry Bradlyn University of Illinois
1530	ADJOURN FOR THE DAY	



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

Agenda Day 3
Thursday, January 9, 2025

Time	Title	Speaker
0800-0830	Registration	
0830-0900	Free Standing Bilayer Metasurfaces: A New Approach to Structured Light	Frederico Capasso Harvard
0900-0930	Nonlocal and Time-Varying Metasurfaces	Francesco Monticone Cornell
0930-1000	Discrete Huygens Representations Using Electric and Magnetic Dipoles with Application to 2D Grating Problems	Thorkild Hansen S4, Inc
1000-1030	BREAK	
1030-1100	Macroscopic Emitters on Deployable Structures: A Group Theoretic Approach	Richard James University of Minnesota
1100-1130	Perfectly-Matched Metamaterials	Anthony Grbic University of Michigan
1130-1230	LUNCH	
1230-1300	Efficient Implementation of Discrete Linear Unitary Operations with Photonic Circuits	Mohammad-Ali Miri Queens College/CUNY
1300-1330	Effective Linear Regimes in Plasmonic 3-Wave Mixing	Alessandro Salandrino University of Kansas
1330-1400	Shallow Recurrent Decoder (SHRED) for Sensing, Wavefield Reconstruction, Model Reduction and Physics Discovery	Nathan Kutz University of Washington
1400	MEETING ADJOURNED	