2019 Electromagnetics Portfolio Annual Contractor Review
Dr. Arje Nachman | January 8-10, 2019 | Arlington, VA

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

Agenda Day 1
Tuesday, January 8, 2019

Time	Title	Speaker
0800-0830	**Registration**	
0830-0900	The Linear Sampling Method in the Time Domain	**David Colton** University of Delaware
0900-0930	A New Approach to Change Detection Using Sparse Bayesian Learning	**Anne Gelb** Dartmouth College
0930-1000	Combining Data-Driven and Physics-Based Methods for EM Propagation & Imaging Through Inhomogeneous Turbulent Media and During Extreme Events	**Alex Mahalov** Arizona State University
1000-1030	**BREAK**	
1030-1100	Force & Hidden Momentum for Classical Microscopic Dipoles	**Arthur Yaghjian** S4, Inc
1100-1130	Parametric Optical Limiters	**Alessandro Salandrino** University of Kansas
1130-1300	**LUNCH**	
1300-1330	Gratings with Preselected Plane-Wave Propagation Directions	**Thorkild Hansen** S4, Inc
1330-1400	Development of Novel Concepts and Algorithms for Improving Imaging and Communication through Random, Discrete-Scatterer Media	**Elizabeth Bleszynski** Monopole Research
1400-1430	**BREAK**	
1430-1500	Light Propagation in Photonic Structures with Phase-changing Components	**Ilya Vitebskiy** AFRL/RY
1500-1530	Electromagnetic Resonance Enhancement	**Margaret Cheney** Colorado State University
1530	**ADJOURN FOR THE DAY**	

Agenda Day 2 Wednesday, January 9, 2019		
Time	**Title**	**Speaker**
0800-0830	**Registration**	
0830-0900	Propagation on Chiral Metasurfaces and Waveguides	**Daniel Sievenpiper** UCSD
0900-0930	Imaging in Moving Random Media	**Liliana Borcea** University of Michigan
0930-1000	Optimized Electromagnetic Devices, Pure Frequencies, Time-Domain Transients, and the Fourier Transform	**Oscar Bruno** CalTech
1000-1030	**BREAK**	
1030-1100	Detection of Target Dispersion in SAR	**Semyon Tsynkov** NCSU
1100-1130	Deep Learning for Radar Imaging	**Birsen Yazici** RPI
1130-1300	**LUNCH**	
1300-1330	Numerical Computation of Wishart Eigenvalue Distributions for Multistatic Radar Detection	**Doug Cochran** Arizona State University
1330-1400	Propagation and Scattering in Turbulent Media	**Knut Solna** UC/Irvine
1400-1430	**BREAK**	
1430-1500	A Mathematical Framework for Optimal Sensor Placement and Dynamic Monitoring Under Cost Constraints	**Nathan Kutz** University of Washington
1500-1530	Regularized Inversion Methods for the Enhancement of Synthetic Aperture Radar Data	**Theresa Scarnati** AFRL/RY
1530	**ADJOURN FOR THE DAY**	

Time	Title	Speaker
Agenda Day 3 **Thursday, January 10, 2019**		
0800-0830	**Registration**	
0830-0900	Echo Removal With Focused Blind Deconvolution	**Laurent Demanet** MIT
0900-0930	Topological Photonics in Open Systems	**Bo Zhen** University of Pennsylvania
0930-1000	Phase Dependent Incoherent Light	**Jason Fleischer** Princeton University
1000-1030	**BREAK**	
1030-1100	A Generalized Hanbury Brown-Twiss Effect and Generalized Scintillations	**Taco Visser** University of Rochester
1100-1130	Empirical Wavelets: Theory and Applications	**Jerome Gilles** San Diego State University
1130-1300	**LUNCH**	
1300-1330	Quantitative Subsurface Imaging in Strongly Scattering Media	**Arnold Kim** UCal/Merced
1330-1400	Performance Bounds for Two-Channel Delay-Doppler Estimation Using Unknown Waveforms	**Sandeep Gogineni** University of Dayton
1400-1430	**BREAK**	
1430-1500	Squeezefit: Label-Aware Dimensionality Reduction by Semidefinite Programming	**Dustin Mixon** Ohio State University
1500-1530	Performance Based Metrics for Training Set Mismatches and Adaptive Interference Cancelation	**Ram Raghavan** AFRL/RY
1530	**MEETING ADJOURNED**	