

2013 Electromagnetics Contractors Meeting

Dr. Arje Nachman | 9-10 January 2013 | Arlington, VA [Hosted Virtually]

Agenda Day 1 Wednesday, January 9, 2013

Time	Title	Speaker
0755–0800	Welcome	Arje Nachman AFOSR/RSE
0800–0830	Imaging through Inhomogeneous Media with Auxiliary Arrays	George Papanicolaou Stanford University
0830–0900	L₁-Minimization via a generalized Lagrange Multiplier Algorithm	Leonid Ryzhik Stanford University
0900–0930	Paraxial Approximations for General Hyperbolic Systems	Knut Solna University of California at Irvine
0930–1000	Wave Propagation and Imaging in Random Waveguides	Liliana Borcea Rice
1000–1030	BREAK	
1030–1100	High-Performance Frequency- and Time-Domain EM Solvers with Application to Realistic DoD Problems	Oscar Bruno Caltech
1100–1130	Quadrature by Expansion: A New Method for the Evaluation of Layer Potentials	Leslie Greengard Courant Institute/NYU
1130–1200	Limitation on Far-Field Super Directivity Using Transformation Optics	Bae-Ian Wu AFRL/RY
1200–1330	LUNCH	
1330–1400	Translation Operator Based on Gaussian Beams	Thorkild Hansen Arcon, Inc
1400–1430	Electromagnetic Helicity Wavelets	Gerald Kaiser Center for Signals and Waves
1430–1500	Definition of an Electromagnetic Continuum and Boundary Conditions for Electric-Quadrupolar Continua	Arthur Yaghjian Arcon, Inc
1500–1530	BREAK	
1530–1600	Anisotropic Impedance Surfaces for Controlling the Flow of Currents on Metallic Bodies	Dan Sievenpiper UCSD
1600–1630	Controlling Coherence by Refraction and Reflection	Mayukh Lahiri University of Rochester
1630–1700	Metamaterial Surfaces for Guidance and Radiation	Anthony Grbic University of Michigan
1700	ADJOURN FOR THE DAY	

Agenda Day 2

Thursday, January 10, 2013

Time	Topic	Speaker
0755–0800	Welcome	Arje Nachman AFOSR/RSE
0800–0830	Selected Aspects of Propagation of EM Waves Through Random, Discrete-Scatterer Media	Elizabeth Bleszynski Monopole Research
0830–0900	The Propagated Field of Rectangular-Modulated Chirped Pulses	Natalie Cartwright SUNYat New Paltz
0900–0930	Coherence, Polarization, and Vortex Effect in Beam Propagation in Turbulence	Greg Gbur UNC at Charlotte
0930–1000	Single-Polarization SAR Imaging in the Presence of Faraday Rotation	Semyon Tsynkov North Carolina State University
1000–1030	BREAK	
1030–1100	Lagrangian Treatment of Systems Composed of High-Loss and Lossless Components	Alex Figotin University of California at Irvine
1100–1130	Nonlinear Methods for Resolution Enhancement in Imaging	Laurent Demanet MIT
1130–1200	Sparse Regularization for Radar Progress Update	Jason Parker AFRL/RV
1200–1330	LUNCH	
1330–1400	Transmission Eigenvalues and the Nondestructive Testing of Dielectrics	David Colton University of Delaware
1400–1430	Fundamental Bounds on Cloaking Using Passive Metamaterials	Andrea Alu University of Texas at Austin
1430–1500	Nonreciprocal Effects in Composite Structures with Engineered Dispersion	Ilya Vitebskiy AFRL/RV
1500–1530	BREAK	
1530–1600	Brewster Angle Effects in Foliage Penetration and Ground Penetration Radar	Richard Albanese ADED Co.
1600–1630	Frequency Response of Scattering Mechanisms of Cavities Measured From a Moving Platform	Analee Miranda AFRL/RV
1630–1700	Use of Nonlinear Solitary Waves for Radar Computations Over Long Distances	John Steinhoff UTSI
1700	MEETING ADJOURN	