

2014 Electromagnetics Contractors Meeting

Dr. Arje Nachman | January 7-8, 2014 | Arlington, VA

Basic Research Innovation Collaboration Center (BRICC)

900 N Glebe Road | Second Floor – East/West Falls Church Room

Arlington, VA 22203

Agenda Day 1 Tuesday, January 7, 2014

Time	Title	Speaker
0700–0800	Registration	
0755–0800	Welcome, etc.	Arje Nachman AFOSR/RTB
0800–0830	Passive SAR Imaging	George Papanicolaou Stanford University
0830–0900	From High to Low Frequency: How Universal is Radiative Transport	Leonid Ryzhik Stanford University
0900–0930	Exploiting Resonances to find Tunnels using SAR	Analee Miranda AFRL/RV
0930–1000	Electromagnetic Wave Propagation in Random Waveguides	Liliana Borcea University of Michigan
1000–1030	BREAK	
1030–1100	Relaxation Methods in Imaging	Laurent Demanet MIT
1100–1130	Generalized Clausius-Mossotti Homogenization for the Permittivity of Electric Quadrupolar Media	Arthur Yaghjian Arcon, Inc
1130–1200	Progress in Experimental Realization of Complex Electromagnetic Structures	Bae-Ian Wu AFRL/RV
1200–1330	LUNCH	
1330–1400	Patterning Techniques for Arbitrary Anisotropic Surfaces	Dan Sievenpiper UCSD
1400–1430	Propagation of Partially Coherent and Partially Polarized Electromagnetic Beams through Multilayered Stratified Media	Mayukh Lahiri University of Rochester
1430–1500	A Zero Backscatter Linearly Polarized Huygens Source	Brad Kramer AFRL/RV
1500–1530	BREAK	
1530–1600	Doppler Effects and Space Based Radar	Richard Albanese ADED Co
1600–1630	Countering Electromagnetic Fields	Daniel Onofrei University of Houston
1630	ADJOURN FOR THE DAY	

Agenda Day 2		
Wednesday, January 8, 2014		
Time	Topic	Speaker
0700–0800	Registration	
0800–0830	Improving Signal-to-noise Ratio in Spectral Multi-band Imaging with Chirped Trains of Pulses	Elizabeth Bleszynski Monopole Research
0830–0900	Tailoring the Phase and Power Flow of Electromagnetic Fields with Metamaterials	Greg Gbur UNC@Charlotte
0900–0930	A Mathematical Model for SAR Imaging Beyond the first Born Approximation	Semyon Tsynkov North Carolina State University
0930–1000	A New Twist: Schur Complements and Resolution of Singular Linear Algebra, with Application to Eigenvalues, Absorptive Rough Surfaces, Antenna Design and Complex Engineering Structures	Oscar Bruno Caltech
1000–1030	BREAK	
1030–1100	Recent Progress in Forward and Inverse Scattering	Leslie Greengard NYU/Courant Institute
1100–1130	Exact Plane-Wave Expansion with Directional Spectrum	Thorkild Hansen Arcon, Inc
1130–1300	LUNCH	
1300–1330	Linear Sampling in the Time Domain	David Colton University of Delaware
1330–1400	Giant Nonreciprocity without Magnetism: Angular-momentum Biased Metamaterials and Devices	Andrea Alu University of Texas at Austin
1400–1430	Reflective Optical and Microwave Limiters based on Non-Linear Localized Modes	Tsampikos Kottos Wesleyan University
	Nonreciprocal Metal-Dielectric Photonic Structures with Extreme Directionality. A Concept of Wide-Aperture Omnidirectional Isolator	Andrey Chabanov University of Texas at San Antonio/AFRL
1430–1500	BREAK	
1500–1530	Tailoring the Phase and Power Flow of Electromagnetic Fields with Metamaterials	Anthony Grbic University of Michigan
1530–1600	Variational Radar Analysis using Electromagnetic Wavelets	Gerald Kaiser Center for Signals and Waves
1600	MEETING ADJOURN	