

2016 MURI Review: Propagation Through Deep Turbulence

Dr. Julie Moses | June 29, 2016 | Arlington, VA

Basic Research Innovation and Collaboration Center (BRICC)
4075 Wilson Blvd., Suite 350 | Justice Room
Arlington, VA 22203

June 29, 2016

Time	Title	Speaker
8:30-9:00	Registration	
0900-0910	Welcome Remarks	Julie Moses, AFOSR and Mikhail Vorontsov, UD
0910-0940	Atmospheric Laser Beam Propagation and Scattering in Deep Turbulence Conditions: Summary of Experimental Trials over Tactical Range Distance	Mikhail Vorontsov, UD
0945-0955	Atmospheric Optical Power Beaming with Adaptive Beam Shaping: Experimental Results	Thomas Weyrauch, UD
0955-1010	Impact of Atmospheric Turbulence and Refractivity on the Modulation Transfer Function of Incoherent Imaging Systems	Zhijun Yang, UD
1010-1025	Wavefront Phase Retrieval with Multi-aperture Zernike Filter for Atmospheric Sensing	Nathan Farwell, UD
1025-1035	BREAK	
1035-1105	An Update on the Physical and Scaling-based Estimation of Optical Turbulence in the Atmosphere	Sukanta Basu, NCSU
1105-1135	Exotic Random Beam Modeling for Mitigation of Deep Turbulence	Olga Korotkova, UM
1135-1150	Simulation of Extended Turbulence in a Temperature Gradient Air Chamber	Italo Toselli, UM
1150-1300	LUNCH	
1300-1330	Equations Needed for Implementation of the Tatarskii C_n^2 Calculation that includes Pressure Perturbations	Steve Fiorino, AFIT
1330-1345	Comparison of Contemporary Refractivity Parameterizations for Optical Turbulence Estimation	Lee Burchett, AFIT
1345-1400	Estimation of Atmospheric Parameters from Time-lapse Imagery	Santasri Basu, AFIT
1400-1410	BREAK	
1410-1440	Analysis of Horizontal Path Time Lapse Image Data	Dave Voelz, NMSU

1440-1510	Simulation of Spherical Wave Propagation in Non-Kolmogorov Turbulence	
1510-1540	Government Discussions	
1540-1600	Closing Comments	Julie Moses, AFOSR
1600	MEETING ADJOURNED	