

2016 Remote Sensing and Imaging Physics Portfolio Annual Review

Dr. Stacie Williams | December 2, 2016 | Arlington, VA

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

Agenda

Time	Title	Speaker
7:30-7:55	Registration	
7:55-8:00	Welcome/Logistics	Dr. Stacie Williams (AFOSR/RT)
8:00-8:25	SSA, The State of National Security Space, and the Associated Role of National Intelligence	Mr. Jeff Gossel (NASIC)
8:25-8:50	Space Policy in The Future	Mr. Scott Simmons (OSD for Space Policy)
8:50-9:15	Faster-than-Realtime Electrostatic Force and Torque Modeling for SSA Applications	Dr. Hanspeter Schaub (University of Colorado)
9:15-9:40	Scale Space Theory for Vision-Based Spacecraft Relative Navigation	Dr. John Christian (West Virginia University)
9:40-9:50	BREAK	
9:50-10:15	Air Force Research Laboratory New Mexico Innovation Center	Dr. Robert Peterkin (AFRL/RD)
10:15-10:40	Optical Characterization of Spacecraft Materials Damaged in a Simulated GEO Environment	Dr. Russell Cooper (AFRL/RV)
10:40-11:05	Imaging Theory and Mitigation in Extreme Turbulence-Induced Anisoplanatism	Dr. Jeremy Bos (Michigan Technological University)
11:05-11:30	Controlling Polarization Artifacts and Bandwidth in Polarimetric Sensors and Imagers	Dr. Scott Tyo (UNSW Canberra at the Australian Defence Force Academy)
11:30-12:45	LUNCH	
12:45-1:10	Dynamical Issues in Space Situational Awareness	Dr. Daniel Scheeres (University of Colorado)
1:10-1:35	Nonlinear High-Fidelity Solutions for Relative Orbital Motion	Dr. Alan Lovell (AFRL/RV)
1:35-2:00	On Solving the Perturbed Multi-Revolution Lambert Problem: Applications in Enhanced SSA	Dr. John Junkins (Texas A&M University)
2:00-2:25	Advanced Orbit Prediction for Resident Space Objects Through Physics-based Learning	Dr. Xiaoli Bai (Rutgers University)
2:25-2:40	BREAK	

2:40-3:05	Photon Orbital Angular Momentum in Starlight	Dr. Daryl Sanchez (AFRL/RD)
3:05-3:30	Measuring and Understanding Polarization of the Atmosphere and Clouds	Dr. Joseph Shaw (Montana State University)
3:30-3:55	Compressive Quantum Sensing	Dr. John Howell (University of Rochester)
3:55-4:20	Super Resolution Remote Imaging Using Time Encoded Remote Apertures	Dr. Andreas Velten (University of Wisconsin)
4:20-4:30	Closing Remarks	Dr. Stacie Williams
5:00	Optional Happy Hour	Rustico Restaurant and Bar 4075 Wilson Blvd, Arlington (Just outside BRICC)