

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

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