

IGARSS2020: IEEE International Geoscience and Remote Sensing Symposium

NASA Earth Science Technology Office (ESTO)-Funded and -Affiliated Presentations and Sessions

Monday, September 28

Paper MO2.R9.7 (15:30-15:40 UTC)

Diagnostic Analysis of a Data Assimilation Framework for Improving Snow Mass Estimation in Complex Terrain - Jawairia Ahmad (Barton Forman)

Paper MO2.R9.9 (15:50-16:00 Utc)

Observing System Simulation Experiment for Remote Sensing of Snow at P-Band - Rashmi Shah, Simon Yueh

Paper MO2.R13.2 (14:40-16:30 UTC)

Improvement of CYGNSS Level 1 Calibration Using Modeling and Measurements of Ocean Surface Mean Square Slope
- Tianlin Wang

Tuesday, September 29

Paper TU2.R13.3 (15:00-16:30 UTC)

Analyses Supporting SNOOPI: A P-Band Reflectometry Demonstration - James Garrison

Paper TU2.R13.4 (15:10-15:20 Utc)

Next Generation Gnss-R Instrument - Christopher Ruf

Paper TU2.R13.5 (15:20-16:30 UTC)

Digital Back End for P-Band Reflections Concepts
- Rashmi Shah

Wednesday, September 30

Paper WE2.R8.4 (15:10-15:20 Utc)

S-MODE: The Sub-Mesoscale Ocean Dynamics Experiment - Dragana Perkovic-Martin, Pantazis Mouroulis

Thursday, October 1

Session TH2.R2: Analytic Center Frameworks for Monitoring and Assessing Disasters Diverse Spatiotemporal Scales - Ian Brosnan and Ben Smith, Co-Chairs

- **Paper TH2.R2.1** (14:30-14:50 UTC)

The Quakes Analytic Center Framework for Addressing Diverse Spatiotemporal Scales of Tectonic and Earthquake Processes - Andrea Donnellan

- **Paper Th2.R2.5** (15:10-15:20 UTC)

Estimation of Fuel Moisture Content by Integrating Surface and Satellite Observations Using Machine Learning - Branko Kosovic

- **Paper TH2.R2.6** (15:20-15:30 UTC)

Supporting Aquaculture in the Chesapeake Bay using Artificial Intelligence to Detect Poor Water Quality with Remote Sensing
- Stephanie Schollaert Uz

- **Paper TH2.R2.7** (15:30-15:40 UTC)

NASA NeMO-Net – A Neural Multimodal Observation & Training Network for Marine Ecosystem Mapping at Diverse Spatiotemporal Scales - Ved Chirayath

- **Paper TH2.R2.8** (15:40-15:50 UTC)

Community Reorganization Response to Climate Change: Species Interactions, State-Space Modeling and Food Webs - Jennifer J. Swenson

Paper TH2.R4.2 (14:50-16:30 UTC)

Lessons Learned from AIRS for Future Grating IR Sounders - Thomas Pagano

Paper TH2.R4.3 (15:00-16:30 UTC)

The Nasa Tropics Mission as a Pathfinder for Future Operational Earth Observing Systems
- William Blackwell

Paper TH2.R4.5 (15:20-16:30 UTC)

Next Generation Microwave Spectrometers for Atmospheric Sounding: Cubesats and Beyond
- Shannon Brown

Paper TH2.R4.7 (15:40 15:40-16:30 UTC)

Real-Time Detection and Filtering of Radio Frequency Interference On-Board a Spaceborne Microwave Radiometer: The CubeRRT Mission - Joel Johnson

Session TH2.R7: Integrating Physical Models into Machine Learning (ML) Models - James Murphy and Jacqueline Le Moigne, Co-Chairs

- **Paper TH2.R7.4** (15:10-15:20 UTC)

A Deep Machine Learning Approach for LIDAR Based Boundary Layer Height Detection
- Jennifer Sleeman

- **Paper TH2.R7.9** (16:00-16:10 UTC)

Quantum Assisted Image Registration
- Craig Pelissier (Jacqueline Le Moigne)

Session TH2.R17: Global Sensing through New Observing Strategies for Local Solutions - Marge Cole and Paul Grogan, Co-Chairs

- **Paper TH2.R17.1** (14:30-14:30 UTC)

Leveraging Space and Ground Assets in a SensorWeb for Scientific Monitoring: Early Results and Opportunities for the Future - Steve Chien

Thursday, October 1, continued

- **Paper TH2.R17.2** (14:50-15:00 UTC)
Coordinating Observation at Global and Local Scales: Service-Oriented Platform to Evaluate Mission Architectures - Paul Grogan
- **Paper TH2.R17.3** (15:00-15:10 UTC)
D-Shield: Distributed Spacecraft with Heuristic Intelligence to Enable Logistical Decisions
- Sreeja Nag
- **Paper TH2.R17.4** (15:10-15:20 UTC)
Sptcor: Sensing Policy Controller and Optimizer
- Mahta Moghaddam
- **Paper TH2.R17.5** (15:20-15:30 UTC)
Emulating and Verifying Sensing, Computation, and Communication in Distributed Remote Sensing Systems - Matthew French
- **Paper TH2.R17.6** (15:30-15:40)
An Innovative SpaceCube Application for Atmospheric Science - James Carr

Friday, October 2

- **Paper FR1.R1.7** (13:00-14:00 UTC)
Soilscape Wireless in situ Networks in Support of CYGNSS Land Applications - Ruzbeh Akbar (Mahta Moghaddam)
- **Paper FR1.R2.8** (13:10-13:20 Utc)
The Smart Ice Cloud Sensing (SMICES) SmallSat Concept - William Deal
- **Paper FR1.R2.11** (13:40-13:50 Utc)
The Smart Ice Cloud Sensing (SMICES) Smallsat Instrument Artificial Intelligence Strategies
- William Deal