

2025 Space Physics Program Review

Dr. Julie Moses | January 28-29, 2025 | Albuquerque, NM

AFRL Innovation Lab at the UNM Science & Tech Park
801 University Blvd. SE | Albuquerque, NM 87106
The review will take place in the Upper-Level Auditorium

Agenda Day 1 | January 28, 2025

| Time | Topic | Speaker |
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| 8:45 | Check in/ Log on | |
| 0900 | Welcome and AFOSR News | Julie Moses, AFOSR |
| 0915 | Global Ionospheric Processes | Kenneth Obenberger AFRL/RV |
| 0945 | A Unified Lower Ionospheric Space Diagnostic | Morris Cohen, surrogate Georgia Tech |
| 1015 | Investigation of the Longitudinal Dependence of Ionospheric Density Distributions | Endawoke Yizengaw, The Aerospace Corp |
| 1045 | BREAK | |
| 1100 | Diagnostics of Natural and Manmade Events over Ukraine | Larisa Goncharenko, MIT Haystack |
| 1130 | Modeling Plasmasphere Structure: Ducts and Irregularities | Joe Huba, Syntek, Inc. |
| 1200 | LUNCH | |
| 1300 | Understanding the Effects of Energy Input from the Solar Wind to the Thermosphere-Ionosphere System | Russell Landry, AFRL/RV |
| 1330 | Modelling Substorm Effects on the Upper Atmosphere Using High-Cadence Forcing from Ground-Based Observations | Cheng Sheng, UTA |
| 1400 | Meso-Scale Coupling from the Polar Cap to the Nightside Auroral Oval | Larry Lyons, UCLA |
| 1430 | The Impacts of Transient Gradients in Eclipse Occultation on the Whole Atmosphere | Sebastian Mrak, JHU/APL |
| 1500 | BREAK | |
| 1515 | Vertical Coupling in the low-latitude atmosphere due to Global Scale Waves and their Nonlinear Interactions | Federico Gasparini, Orionspace |
| 1545 | Understand and Forecast Killer Electrons (Via Zoom) | Xiangning Chu, CU-Boulder |
| 1615 | Analysis of Demonstration and Science Experiment Observations | Jay Albert, AFRL/RV |

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| 1645 | ADJOURN FOR THE DAY |
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| Agenda Day 2 Wednesday, January 29, 2025 | | |
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| Time | Topic | Speaker |
| 8:45 | Check in/ Log on | |
| 0900 | Preparing Today to use Polarimetry for Tomorrow's Space Weather Forecasting | Curt DeKoning, CU-Boulder |
| 0930 | The Early Chromospheric Dynamics of Solar Energetic Events | KD Leka, NWRA |
| 1000 | ADAPT Multisource Ensemble Modeling | Sam Schoenfeld, AFRL/RV |
| 1030 | BREAK | |
| 1045 | Investigating Propagation Characteristics of Ground Transmitter Signals | Lunjin Chen, UTD |
| 1115 | MHD-Test Particle Simulations of 10 May CME-Shock Injection of Radiation Belt Electrons and Protons | Mary Hudson, Dartmouth |
| 1145 | LUNCH | |
| 1300 | Statistical Studies of High-Power Whistler Wave Transmissions from a Space-Born Transmitter | Paul Song, U Mass - Lowell |
| 1330 | Nonlinear Magnetosphere-Ionosphere Interactions in the Sub-Auroral Zone (via Zoom) | Anatoly Streltsov, Embry-Riddle |
| 1400 | Understanding VHF Intense Processes in Lightning (via Zoom) | Ningyu Lu, U – New Hampshire |
| 1430 | BREAK | |
| 1445 | Thermospheric Wind around the Cusp (Via Zoom) | Yu Zing, JHU/APL |
| 1515 | High-latitude electrodynamics via assimilation of ionospheric plasma densities (via Zoom) | Seebany Datta-Barua, IIT |
| 1545 | ADJOURN FOR THE DAY | |