# Tuesday, July 20

## Session: **Welcome**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 7:00 AM | Gregory Schmidt | | |
| 7:10 AM | Mahesh Anand | | |

## Session: **Plenary 1**

**Chaired by: Gregory Schmidt & Mahesh Anand**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 7:20 AM | David Parker | Our Eighth Continent: The Moon within ESA's Exploration Programme Terrae Novae | |
| 7:30 AM | Jim Green | Our Rare Moon | |
| 7:40 AM | Noah Petro | The Lunar Reconnaissance Orbiter in the Era of Artemis and Commercial Lunar Payload Services (CLPS): The Future of LRO in a New Age of Lunar Exploration | View Abstract |
| 7:50 AM | Bethany Ehlmann | Lunar Trailblazer: A Pioneering Smallsat for Lunar Water and Lunar Geology | View Abstract |
| 8:00 AM | Daniel Andrews | VIPER MISSION UPDATE | View Abstract |

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 8:10 AM | Anthony Colaprete | The Volatiles Investigating Polar Exploration Rover (VIPER) Mission: Measurement Goals, Traverse Planning and Mission Status | View Abstract |
| 8:20 AM | David Heather | THE ESA PROSPECT PAYLOAD FOR LUNA 27: DEVELOPMENT STATUS AND SCIENCE ACTIVITIES | View Abstract |
| 8:30 AM | Alexandre Meurisse | DEFINITION OF THE SCIENTIFIC OBJECTIVES OF THE ESA ISRU DEMONSTRATION MISSION (ISRU-DM). | View Abstract |
| 8:40 AM | Charles Shearer | UPDATES ON APOLLO NEXT GENERATION SAMPLE ANALYSIS (ANGSA) INITIATIVE AND LESSONS LEARNED FOR THE NEXT STEPS IN HUMAN EXPLORATION OF THE MOON | View Abstract |

## Session: **EDI Plenary 1**

**Chaired by: Gregory Schmidt**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 9:00 AM | Donald James | Diversity, Equity, Inclusion and Anti-Racism at NASA | |

## Session: **Student Lightning Talks & Poster Session Overview**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 9:20 AM | Kristina Gibbs | Poster Session Overview | |

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 9:24 AM | Nicholas Piskurich | Compositional Characterization of the Four Largest Irregular Mare Patches via M3 and Diviner Data Analyses ⚡ | View Abstract |
| 9:26 AM | Aisha Khatib | Classifying Deep Moonquakes Using Convolutional Neural Nets ⚡ | View Abstract |
| 9:28 AM | Linden Wike | Detection of subsurface voids using gmsh and SPECFEM2D with applications to lunar and martian lava tubes ⚡ | View Abstract |

## Session: **Break**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 9:30 AM | | **Break** | |

## Session: **Poster Session 1**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 9:45 AM | | **Lunar Volatile System** | |
| 9:45 AM | | **Space Environment** | |
| 9:45 AM | | **Geology & Geophysics** | |
| 9:45 AM | | **Payloads & Services** | |

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 9:45 AM | | **Building Better Worlds** | |

## Session: **Break**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 11:15 AM | | **Break** | |

## Session: **Polar Exploration I (Artemis, Context)**

**Chaired by: Hannes Bernhardt & Noah Petro**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 11:30 AM | James Head | GEOLOGIC CONTEXT FOR LUNAR SOUTH CIRCUMPOLAR REGION (SCR) EXPLORATION: IMPLICATIONS FOR GOALS, SITE SELECTION AND OPERATIONS STRATEGY | View Abstract |
| 11:40 AM | Brad Jolliff | Sample Science for Artemis: Collecting Materials from the Giant South Pole-Aitken Basin | View Abstract |
| 11:50 AM | Carle Pieters | The Probability of Artemis Collecting Deep-seated Material from SPA at the South Pole is TINY, Unless... | View Abstract |
| 12:00 PM | Hannes Bernhardt | Identification of new science targets based on mapping (1:10,000) of Artemis III AOI 001 & 004 on the Shackleton-de Gerlache ridge | View Abstract |

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 12:10 PM | Brent Garry | The Distribution and Geologic Context of Boulders and Outcrops Along the Connecting Ridge Lunar South Pole Exploration Site | View Abstract |
| 12:20 PM | Prasun Mahanti | Secondary Illumination in Large Permanently Shadowed Regions at the Lunar PSRs | View Abstract |
| 12:30 PM | Caitlin Ahrens | Shedding Light on the Darkness: Diversity of Permanently Shadowed Regions (PSRs) at the Lunar South Pole | View Abstract |
| 12:40 PM | Claudia Poehler | A Geological Map of the South Pole-Aitken Basin Region ⚡ | View Abstract |
| 12:42 PM | Nandita Kumari | SURFACE ILLUMINATION, TEMPERATURES, AND COLD TRAPS AT TWO POTENTIAL LANDING SITES NEAR THE LUNAR SOUTH POLE ⚡ | View Abstract |
| 12:44 PM | | **Discussion** | |

## Session: **Asteroids**

**Chaired by: Hsiang-Wen Hsu & Stephanie Jarmak**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 11:30 AM | Masatoshi Hirabayashi | Hayabusa2 Extended Mission to Rendezvous with Asteroid 1998 KY26, a Small Fast Rotator, to Explore Planetary Defense and Material Transport | View Abstract |
| 11:40 AM | Humberto Campins Campins | MORE EXOGENOUS MATERIAL ON ASTEROID (101955) BENNU | View Abstract |

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 11:50 AM | Joseph DeMartini | The Influence of Irregular Grain Shape on The Brazil-nut Effect in Low-Gravity | View Abstract |
| 12:00 PM | Hsiang-Wen Hsu | LEAVE NO STONE UNTURNED – MODELING ASTEROID REGOLITH GRAIN SIZE EVOLUTION | View Abstract |
| 12:10 PM | Lauren McGraw | OH/H2O on Near-Earth Asteroids | View Abstract |
| 12:20 PM | Vanessa Lowry | T-MATRIX AND HAPKE MODELING OF TIR SPECTRA OF TROJAN ASTEROIDS | View Abstract |
| 12:30 PM | Yaeji Kim | Structural Condition of Asteroid 1998 KY26, the New Target of Hayabusa2 Extended Mission | View Abstract |
| 12:32 PM | Marina Gemma | Evaluating Mineral Variation and Metal Coarsening Across Petrologic Types of H Chondrite Meteorites | View Abstract |
| 12:34 PM | Holly Bensel | EVIDENCE FOR WATER ON VESTA: COMPARING THE GEOMORPHOLOGY OF DEBRIS FLOWS IN CRATERS ON EARTH, MARS, THE MOON, AND VESTA | View Abstract |
| 12:36 PM | Katerina Slavicinska | Analyzing the Polycyclic Aromatic Hydrocarbon Inventory of Carbonaceous Chondrites via High-Resolution Two-Step Laser Mass Spectrometry | View Abstract |
| 12:38 PM | Ryota Nakano | FINITE ELEMENT MODELING APPROACH THERMOPHYSICAL MODEL TO CHARACTERIZE IRREGULARLY SHAPED BODIES' TEMPERATURE VARIATION | View Abstract |
| 12:40 PM | | **Discussion** | |

# Wednesday, July 21

## Session: **Networking Hour 1**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 6:00 AM | | **Networking Event** | |

## Session: **Lunar Volatile System**

**Chaired by: Kathleen Mandt & Elizabeth Fisher**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 7:00 AM | Alice Stephant | Deuterium-poor water source for the Moon and the Early Earth | View Abstract |
| 7:10 AM | Kathleen Mandt | The Origin of Volatiles Sampled by the LCROSS Mission in Cabeus Crater | View Abstract |
| 7:20 AM | Paul Lucey | Shy volatiles: how volatiles in the lunar polar cold traps may use physics to escape detection | View Abstract |
| 7:30 AM | Charles Hibbitts | A CONUNDRUM IN THE OBSERVED DIURNAL SPECTRAL VARIATION OF WATER ON THE MOON | View Abstract |
| 7:40 AM | Casey Honniball | LUNAR HYDRATION DEPENDENCE ON TEMPERATURE FROM GROUND-BASED OBSERVATIONS AT 3μm | View Abstract |
| 7:50 AM | Abigail Flom | Telescopic Hydration Observations of Chang'e 5 Landing Site in Partial Eclipse | View Abstract |

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 8:00 AM | Khari Fletcher | ANALYSIS OF LADEE MEASUREMENTS OF H2 IN THE LUNAR EXOSPHERE ⚡ | View Abstract |
| 8:02 AM | Elizabeth Fisher | Identifying and characterizing surface adsorbed water on the lunar surface ⚡ | View Abstract |
| 8:04 AM | Christian Gscheidle | DETERMINATION OF THE KNUDSEN DIFFUSION COEFFICIENT OF WATER THROUGH NU-LHT-2M USING A FAST PULSE TECHNIQUE ⚡ | View Abstract |
| 8:06 AM | Pedro Montalvo | Contributions of impact mixing to the spatial distribution of water ice in permanently shaded lunar south polar craters Haworth, Shoemaker and Faustini ⚡ | View Abstract |
| 8:08 AM | | **Discussion** | |

## Session: **Crewed Exploration (Astronaut Training, ConOps)**

**Chaired by: David Kring & Cherie Achilles**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 7:00 AM | David Kring | Geologic and Exploration Training for Lunar Surface Operations | View Abstract |
| 7:10 AM | Noah Petro | Artemis Field Geology Investigations: Lessons from Apollo | View Abstract |
| 7:20 AM | Gordon Osinski | Robotic Precursor, Assistant, and Postcursor Activities in Support of Human Lunar Exploration: Lessons Learned from Analogue Missions | View Abstract |

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 7:30 AM | Janine Moses | Heads-Up Display Technology for Deep-Space Spacewalks | View Abstract |
| 7:40 AM | Cherie Achilles | Integration and Visualization of Geochemical Data for Tactical Decision Making during Crewed Surface Operations | View Abstract |
| 7:50 AM | Zachary Morse | Augmented Reality Visualization of Geologic Data Collected With Portable Field Instruments | View Abstract |
| 8:00 AM | Michael Walker Walker | Mixed Reality Cyber-Physical Virtual Control Rooms for Lunar Robot Teleoperation and Supervision | View Abstract |
| 8:02 AM | Tara Sweeney | DOCUMENTING PLANETARY SURFACE OPERATIONS USING AUTOMATIC IMAGING PLATFORMS AND 3D IMAGE PROCESSING | View Abstract |
| 8:04 AM | Christopher Proppe | THE EFFECTS OF A COOLING GARMENT ON EXERCISE PERFORMANCE AND PERCEIVED EXERTION: A PRELIMINARY REPORT | View Abstract |
| 8:06 AM | Gregory Smith | Analysis of the Neuropulmonary Axis Following Lunar Regolith Simulant Exposure | View Abstract |
| 8:08 AM | Mason Bell | Construction of Lunar Infrastructure Leveraging Low-Latency VR/AR Teleoperation | View Abstract |
| 8:10 AM | Kristoffer Sjolund | Hybrid Dust Mitigation Brush Utilizing EDS and UV Technologies | View Abstract |
| 8:12 AM | | **Discussion** | |

## Session: **Space Environment (Plasma, Magnetosphere)**

Chaired by: Andrew Poppe & Daoru Han

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 7:00 AM | Andrew Poppe | The Lunar Paleo-magnetosphere: Fractionation of Solar Wind Minor Ion Flux | View Abstract |
| 7:10 AM | SHAOSUI XU | Lunar photoemission yields inferred from ARTEMIS measurements | View Abstract |
| 7:20 AM | Robert MacDowall | Radio Data from the Radio Observations at the Lunar Surface of the photoElectron Sheath (ROLSES) NASA lunar payload | View Abstract |
| 7:30 AM | Michael Collier | THE LUNAR ENVIRONMENT HELIOSPHERIC X-RAY IMAGER (LEXI): A FIREFLY AERO-SPACE/BLUE GHOST MISSION 1 PAYLOAD TO OBSERVE THE SOLAR WIND-MAGNETOSPHERE INTERACTION | View Abstract |
| 7:40 AM | Leonardo Surdo | ERSA and IDA: An external and an internal radiation research payload for early Gateway utilization | View Abstract |
| 7:50 AM | Fatemeh Rahmanifard | HYSTERESIS IN THE GALACTIC COSMIC RAY VARIATION AND IMPLICATIONS FOR FUTURE SOLAR ACTIVITY | View Abstract |
| 8:00 AM | Faris Almatouq | UTILIZING HEXAGONAL BORON NITRIDE AND GRAPHENE FIELD EFFECT TRANSISTORS FOR NEUTRON DOSIMETRY ⚡ | View Abstract |
| 8:02 AM | | **Discussion** | |

## Session: **Transition**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 8:40 AM | | **Transition to Plenary** | |

## Session: **PRISM Payload Suites Panel**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 8:45 AM | David Blewett | Lunar Vertex: Exploring the Intersection of Geoscience and Space Plasma Physics | |
| 9:00 AM | Mark Panning | Farside Seismic Suite | |
| 9:15 AM | Robert Grimm | Lunar Interior Temperature and Materials Suite (LITMS) | |
| 9:30 AM | | **Discussion** | |

## Session: **Break**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 9:45 AM | | **Break** | |

## Session: **Poster Session 2**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 10:00 AM | | **Polar Exploration** | |
| 10:00 AM | | **Astronauts & Analogs** | |
| 10:00 AM | | **ISRU** | |
| 10:00 AM | | **Asteroids** | |
| 10:00 AM | | **Dust Mitigation & Astronaut Health** | |

## Session: **Break**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 11:30 AM | | **Break** | |

## Session: **Polar Exploration II (PSRs)**

**Chaired by: Ariel Deutsch & Shuai Li**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 11:45 AM | Ariel Deutsch | Roughness Measurements of Ice-Bearing Craters on Mercury and the Moon | View Abstract |
| 11:55 AM | Shuai Li | CHARACTERIZING POTENTIAL LANDING SITES FOR FUTURE EXPLORATION OF LUNAR SURFACE WATER ICE | View Abstract |

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 12:05 PM | Myriam Lemelin | Investigating Water Ice Detections in Lunar Permanently Shaded Regions Using the Kaguya Spectral Profiler Data | View Abstract |
| 12:15 PM | Alexander Sehlke | LUNAR COLD TRAPS: PROSPECTING BY THERMOLUMINESCENCE | View Abstract |
| 12:25 PM | Paul Hayne | Polar night-vision at the Moon's south pole: the Lunar Compact Infrared Imaging System (L-CIRiS) | View Abstract |
| 12:35 PM | Martin Losekamm | A Compact Cosmic-Ray and Neutron Spectrometer for Lunar Exploration Missions | View Abstract |
| 12:45 PM | John Robert Brucato | WATER DESORPTION FROM LUNAR SAMPLE ANALOGUES TO SUPPORT THE ESA PROSPECT INSTRUMENT DEVELOPMENT | View Abstract |
| 12:55 PM | | **Discussion** | |

## Session: **Terrestrial Analogs (Field Studies, Simulants)**

**Chaired by: M. Elise Rumpf & Caela Barry**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 11:45 AM | Ernest Bell | Terrestrial Lunar Analogs Field Geophysics Lessons for Lunar Surface Science Operations | View Abstract |
| 11:55 AM | Benjamin Feist | HORIZONTALLY INTEGRATED INFORMATICS TO SUPPORT SCIENCE OPERATIONS IN HUMAN SPACEFLIGHT | View Abstract |

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 12:05 PM | Sarah Seitz | Data Synthesis for Drilling and Sampling in Analog Studies | View Abstract |
| 12:15 PM | M. Elise Rumpf | The Case for a Terrestrial Analogs Data Portal | View Abstract |
| 12:25 PM | Caela Barry | NASA's Planetary Analogs Website: Analog Field Work for Broad Audiences.. | View Abstract |
| 12:35 PM | Darlene Lim | CONSIDERATIONS TOWARDS BUILDING INCLUSIVE ANALOG WORK ENVIRONMENTS | View Abstract |
| 12:45 PM | | **Discussion** | |

## Session: **Surface Composition and Sample Analysis**

**Chaired by: John Pernet-Fisher & Timothy Glotch**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 11:45 AM | Marjolein Daeter | Experimental data on partial melting of an ilmenite-bearing cumulate layer in the Moon | View Abstract |
| 11:55 AM | John Pernet-Fisher | Records of High Temperature Metamorphism in the Lunar Crust in Lunar Granulites | View Abstract |
| 12:05 PM | Shyama Narendranath | Remote sensing minor elements on the lunar surface | View Abstract |
| 12:15 PM | Christopher Kremer | Remote Mg# Determination of Olivine and Pyroxene in the 4-8 Micron "Cross-Over" Range | View Abstract |

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 12:25 PM | Benjamin Greenhagen | Unmixing Lunar Surface Compositions Using Near Infrared and Thermal Infrared Datasets: Connecting Orbital and Laboratory Measurements | View Abstract |
| 12:35 PM | Chiara Ferrari-Wong | Lunar HyTI: A Thermal Infrared Hyperspectral Imager for Meter Scale Data Collection from Orbit | View Abstract |
| 12:45 PM | Yang Gao | PHASE-A STUDY ON LUNAR “VOLATILE AND MINERALOGY MAPPING ORBITER (VMMO)” MISSION | View Abstract |
| 12:55 PM | Ryan Galinkin | Characterizing the Effects of Porosity and Particle Size on TIR Olivine Spectral Features | View Abstract |
| 12:57 PM | Krishan Kumar Bhanot | Spinel symplectite textures in Lunar Dunites 72415 and 72417 | View Abstract |
| 12:59 PM | David Black | 3D Modeling of Commercially Viable Lunar Materials | View Abstract |
| 13:01 PM | Amanda Stadermann | Preliminary Petrologic Characterization of Apollo 16 Clast-Rich Impact Melt Rocks | View Abstract |
| 13:03 PM | | **Discussion** | |

# Thursday, July 22

## Session: **EDI Plenary 2**

**Chaired by: Gregory Schmidt**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 7:00 AM | Isabel Torres / Ryan Watkins | Why are mothers in STEMM lagging behind? A call to action from Mothers in Science | |
| 7:20 AM | JA Grier | SSERVI Equity, Diversity, Inclusion and Accessibility Focus Group | |

## Session: **Transition**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 7:30 AM | | **Transition to Parallel** | |

## Session: **Astrophysics**

**Chaired by: Jack Burns & Marin Anderson**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 7:35 AM | Jack Burns | RADIO SCIENCE FROM THE MOON ENABLED BY NASA COMMERCIAL LUNAR PAYLOAD SERVICES | View Abstract |

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 7:45 AM | Joshua Hibbard | Cosmology from the Lunar Farside with DAPPER: Effects of Warm Dark Matter Models on the Global 21-cm Emission Signal. | View Abstract |
| 7:55 AM | Neil Bassett | Quantifying the Effect of Lunar Topography on Global 21-cm Cosmology Analysis for DAPPER | View Abstract |
| 8:05 AM | Alexander Hegedus | Simulating the 21-cm Imaging Capabilities of the FARSIDE Array | View Abstract |
| 8:15 AM | Jan Harms | Lunar Gravitational-wave Antenna | View Abstract |
| 8:25 AM | Ethan Ayari | Visualizing Ring Currents with a Planeterrella Device ⚡ | View Abstract |
| 8:27 AM | Nivedita Mahesh | Estimation of polarization effects on sky visibilities for FARSIDE ⚡ | View Abstract |
| 8:29 AM | | **Discussion** | |

## Session: **Space Weathering and Regolith Evolution**

**Chaired by: Jeffrey Gillis-Davis & Li Hsia Yeo**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 7:35 AM | Liam Morrissey | Simulating the Diffusion of Protons in Amorphous Silicates | View Abstract |
| 7:45 AM | ZIYU HUANG | Atomic-scale simulation of lunar water retention induced by space weathering | View Abstract |

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 7:55 AM | Jeffrey Gillis-Davis | Analyzing Dual Laser Space Weathering Effects | View Abstract |
| 8:05 AM | Brittany Cymes | Variation in nanophase metallic iron particle occurrence in exsolved space-weathered lunar pyroxene | View Abstract |
| 8:15 AM | Mark Nottingham | APOLLO 12 REGOLITH BASALT NOBLE GAS SYSTEMATICS: IMPLICATIONS FOR FUTURE EXPLORATION | View Abstract |
| 8:25 AM | Ramin Lolachi | OPTICAL MONITORING OF THE DUST ENVIRONMENT AROUND LUNAR EXPLORATION SITES | View Abstract |
| 8:35 AM | Autumn Shackelford | Morphologic and Spectral Characterization of Regolith Breakdown Due to Water Ice | View Abstract |
| 8:37 AM | Stephanie Connell | IRIS CUBESAT TO MEASURE THE EFFECTS OF SPACE WEATHERING ON LUNAR SAMPLES | View Abstract |
| 8:39 AM | Eric Frizzell | POST-IMPACT GRANULAR DILATION ON AIRLESS BODIES | View Abstract |
| 8:41 AM | Dany Waller | INVESTIGATION OF MAGNETIC FIELDS ASSOCIATED WITH VARIOUS LUNAR SWIRLS OBSERVED IN THE FAR-ULTRAVIOLET | View Abstract |
| 8:43 AM | | **Discussion** | |

## Session: **Destinations (Landing Sites)**

**Chaired by: Carolyn van der Bogert & Pascal Lee**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 7:35 AM | Yuqi Qian | China's Chang'e-5 Landing Site: An Overview | View Abstract |
| 7:45 AM | Carolyn van der Bogert | Ages of geological units in the Schrödinger basin: Context for PRISM CLPS 2024 | View Abstract |
| 7:55 AM | Samantha Bell | GEOLOGIC MAP OF A SEGMENT OF THE SCHRÖDINGER PEAK RING AND POTENTIAL ROVER TRAVERSES | View Abstract |
| 8:05 AM | Pascal Lee | Schrödinger CAT: A Proposed NASA PRISM Investigation of the Schrödinger Pyroclastic Vent and Permanently Shadowed Regions, Schrödinger Basin, Far Side, Moon | View Abstract |
| 8:15 AM | Harald Hiesinger | The Rima Bode Region: Volcanism/ISRU Exploration Site | View Abstract |
| 8:25 AM | Sascha Mikolajewski | Landing Site Evaluation of the Moscoviense Basin | View Abstract |
| 8:35 AM | Francesco Sauro | Moving forward the exploration of the Moon subsurface: the Lunar Caves mission study at the ESA Concurrent Design Facility (CDF) | View Abstract |
| 8:45 AM | Prateek Tripathi | Mineralogical Diversity of Von Karman Crater from the Visible and Near-Infrared Imaging Spectrometer (VNIS) Data onboard Chang'e 4 Rover ⚡ | View Abstract |
| 8:47 AM | | **Discussion** | |

## Session: **Break**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 9:15 AM | | **Break** | |

## Session: **Poster Session 3**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 9:30 AM | | **Surfaces Composition & Sample Analysis** | |
| 9:30 AM | | **Space Weathering & Regolith Evolution** | |
| 9:30 AM | | **Destinations (Landing Sites)** | |
| 9:30 AM | | **Astrophysics** | |

## Session: **Break**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 11:00 AM | | **Break** | |

## Session: **ISRU**

Chaired by: Jennifer Heldmann & Alexandre Meurisse

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 11:15 AM | Jennifer Heldmann | Science, Exploration, and Public Engagement from NASA's SSERVI RESOURCE (Resource Exploration and Science of OUR Cosmic Environment) Project | View Abstract |
| 11:25 AM | Alexandre Meurisse | PROGRESS UNDERSTANDING LUNAR OXYGEN EXTRACTION WITH THE FFC PROCESS | View Abstract |
| 11:35 AM | Pierre-Alexis Joumel | An Economically Viable Lunar ISRU Process for Oxygen and Metal Production and Related Benefits for Terrestrial Applications | View Abstract |
| 11:45 AM | Aidan Cowley | ADVANCES IN ADDITIVE MANUFACTURING USING LUNAR REGOLITH SIMULANTS | View Abstract |
| 11:55 AM | Sungwoo Lim | A microwave Heating Demonstrator (MHD) payload for lunar construction and resource extraction | View Abstract |
| 12:05 PM | Kris Zacny | THE REGOLITH AND ICE DRILL FOR EXPLORING NEW TERRAINS (TRIDENT) ON NASA'S VOLATILES INVESTIGATING POLAR EXPLORATION ROVER (VIPER) AND POLAR RESOURCES ICE MINING EXPERIMENT (PRIME-1). | View Abstract |
| 12:15 PM | Sebastian Netter | iDRILL – An Instrumented Drill for Lunar Volatile Prospecting | View Abstract |
| 12:25 PM | | **Discussion** | |

## Session: **Dust Mitigation and Astronaut Health**

**Chaired by: Douglas Fontes & Jon Rask**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 11:15 AM | Douglas Fontes | Lunar Regolith Particles Interacting with a Lander Rocket Plume at Low Altitudes | View Abstract |
| 11:25 AM | Dhaka Sapkota | GRAVITY SCALING OF THE CRATERING MECHANISM BY A COLD TURBULENT SUBSONIC JET. | View Abstract |
| 11:35 AM | Benjamin Farr | ELECTRON BEAM DUST MITIGATION METHOD FOR LUNAR SURFACE EXPLORATION | View Abstract |
| 11:45 AM | Zach Seibers | Design and Performance Considerations of Graphene-Laminated Thermoplastics for Electrically Conductive Applications in Space | View Abstract |
| 11:55 AM | Jon Rask | Chemical Reactivity of In-Situ Lunar Dust for Biotoxicity Assessment | View Abstract |
| 12:05 PM | Donald Hendrix | Hydroxyl Radical Generation of Lunar Dust Analogs in Biologically Relevant Human Respiratory System Fluids | View Abstract |
| 12:15 PM | Hsing-Ming (Jamie) Chang | DAMAGE PROVOKED BY EXPOSURE OF HUMAN LUNG CELLS TO LUNAR REGOLITH SIMULANTS | View Abstract |
| 12:25 PM | | **Discussion** | |

## Session: **Geology and Geophysics**

**Chaired by: Wajiha Iqbal & Jacob Richardson**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 11:15 AM | Sara Gutierrez | CONSEQUENCES OF THE NUCLEATION BARRIER ON LUNAR CORE FORMATION | View Abstract |

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 11:25 AM | Marissa Lo | Investigating the effect of varying magmatic volatile content on lunar magma ascent dynamics | View Abstract |
| 11:35 AM | Julie Stopar | MARE DEPOSITS IN THE AUSTRALE REGION OF THE MOON | View Abstract |
| 11:45 AM | Edward Williams | EFFECTS OF LUNAR LAVA TUBE SHAPE AND DIMENSION ON INTERNAL FAILURE AND EXTERNAL OBSERVABILITY | View Abstract |
| 11:55 AM | Samuel Halim | Modelling carbonaceous chondrite survival: a potential resource cache on the lunar surface. | View Abstract |
| 12:05 PM | Wajiha Iqbal | A Source of Young Ages at the Apollo 15 Landing Site | View Abstract |
| 12:15 PM | Lauren Talkington | REDUCTION OF CRATER POPULATIONS GREATER THAN 600-800 M IN DIAMETER ON THE WALLS OF LUNAR COMPLEX CRATERS FROM MASS MOVEMENT EVENTS | View Abstract |
| 12:25 PM | | **Discussion** | |

## Session: **Networking Hour 2**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 13:00 PM | | **Networking Event** | |

# Friday, July 23

## Session: **Agency Panel**

**Chaired by: Kristina Gibbs**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 7:00 AM | James Carpenter | **ESA Lunar** | |
| 7:15 AM | Sarah Noble | **NASA Lunar Science** | |
| 7:30 AM | Julie Robinson | **Artemis and HEO** | |
| 7:45 AM | Masaki Fujimoto | **JAXA Future Exploration** | |

## Session: **Integrity in Science**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 8:00AM | David Draper | Integrity in Science | |

## Session: **Student Poster Competition Awards**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 8:15 AM | | **Award Presentations** | |

## Session: **Transition**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 8:30 AM | | **Transition to Parallel** | |

## Session: **Building Better Worlds (EDIA/Public Engagement)**

**Chaired by: JA Grier & Sanlyn Buxner**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 8:35 AM | JA Grier | ENGAGING KEY SPACE EXPLORATION STAKEHOLDERS IN ETHICS, INCLUSION, AND DE-COLONIZATION | View Abstract |
| 8:45 AM | Natalie Trevino | The Inequity of the Final Frontier | View Abstract |
| 8:55 AM | Abbie Grace | NZ MĀORI AND ABORIGINAL AUSTRALIANS: LEARNING FROM INDIGENOUS CONTRIBUTIONS TO ASTRONOMY AND EXPLORATION | View Abstract |
| 9:05 AM | Alexandra Matiella Novak | RESOURCE Public Outreach and Engagement: Storytelling as a Way to Connect with Diverse Communities | View Abstract |
| 9:15 AM | Omah Williams-Duncan | AN OVERVIEW OF PHASE 3 RESEARCH ABOUT THE EXPLORATION OF THE MOON AND ASTEROIDS BY SECONDARY STUDENTS (EXMASS) PROGRAM | View Abstract |

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 9:25 AM | Ashley Smith | Cultivating Student Engagement in STEM: Exploring Scientist Advisor, Teacher Mentor, and Student Team Relationships toward Student Team Success in the Exploration of the Moon and Asteroids by Secondary Students (ExMASS) Program | View Abstract |
| 9:35 AM | Frances Zhu | ARTEMIS CUBESAT KIT: A LOW-COST, SPACEFLIGHT-READY 1U CUBESAT AND EDUCATIONAL MATERIALS IN THE PUBLIC DOMAIN | View Abstract |
| 9:45 AM | | **Discussion** | |

## Session: **Payloads and Services**

**Chaired by: Prabal Saxena & Nelly Offord**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 8:35 AM | Sebastian Els | The Science System on-board the Rashid rover of the Emirates Lunar Mission | View Abstract |
| 8:45 AM | Seiichi Nagihara | Heat flow measurement planned on the Blue Ghost mission to Mare Crisium | View Abstract |
| 8:55 AM | Prabal Saxena | IN-SITU ARTIFICIAL SUBSTRATE WITNESS PLATES: GROUND TRUTH FOR KEY PROCESSES ON THE MOON AND OTHER PLANETS | View Abstract |
| 9:05 AM | Marco Muccino | THE MPAC PROJECT: OVERVIEW AND SCIENTIFIC OBJECTIVES | View Abstract |
| 9:15 AM | Christiane Bergemann | The European Commercial Lunar Surface Access Service (LSAS) | View Abstract |

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 9:25 AM | Nelly Offord | Data-relay communication and navigation services – comms services from 2024 with Lunar Pathfinder, paving the way for a future Lunar Comms and Nav constellation | View Abstract |
| 9:35 AM | | **Discussion** | |

## Session: **Break**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 10:15 AM | | **Break** | |

## Session: **SSERVI Award Presentation**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 10:30 AM | | **Shoemaker - Paul Lucey** | |
| 10:50 AM | | **Coradini - Tim Glotch** | |
| 11:05 AM | | **Wargo - Darlene Lim** | |
| 11:20 AM | | **Niebur - Shuai Li** | |
| 11:35 AM | | **Niebur - Parvathy Prem** | |

## Session: **Closing Plenary**

| Time (PT) | Name | Title | Abstract |
|---|---|---|---|
| 12:00 PM | James W. Head | The Apollo Lunar Exploration Program: Celebrating the Past and Inspiring the Future | |
| 12:15 PM | Lindy Elkins-Tanton | The Interplanetary Initiative | |