

## Wednesday August 23<sup>rd</sup>, 2023: Salon C

### *Passive Thermal Presentation Session #9*

- 08:00 to 08:30: Power and Propulsion Element Passive Thermal Summary
- 08:30 to 09:00: Mars Sample Recovery Helicopter Thermal System Design
- 09:00 to 09:30: Using Thermal Desktop to Model Effects of Plume Heating on MLI
- 09:30 to 10:00: Europa Clipper System TVAC Planning

### *Passive Thermal Presentation Session #10*

- 13:30 to 14:00: Flame Deflector Ablation Analysis based on Artemis 1 Launch Environment
- 14:00 to 14:30: Passive, Radially Deployed Radiator Panels for CubeSat Thermal Control
- 14:30 to 15:00: Experimental Characterization of Cryogenic Heat Pipe Evaporator for Lunar Ice Collection
- 15:00 to 15:30: Aluminum-Ammonia Heat Spreader for Lunar Surface Applications

### *Passive Thermal Presentation Session #11*

- 15:45 to 16:15: Design Considerations and Analysis of Experimental Test Structures used in Thermal Vacuum Testing
- 16:15 to 16:45: Thermal Radiative Modeling of Spacecraft Windows in Future Human-Rated Spacecraft

## Wednesday August 23<sup>rd</sup>, 2023: Salon D

### *Active Thermal Presentation Session #3*

- 08:00 to 08:30: Title: Analysis, Design, Implementation, and Testing of Mechanically Pumped Fluid Loops (MPFL) for Spacecraft Thermal Control system.
- 08:30 to 09:00: HYBRID NANOFLUIDS HEAT TRANSFER IN METAL FOAM AND COMPARISON TO ORDINARY NANOFLUIDS
- 09:00 to 09:30: High Speed Twin Helical Screw Compressor for Enabling a Sub-Ambient Thermal Control System for Manned Spacecraft

### *Active Thermal Presentation Session #4*

- 14:30 to 15:00: Digital Twin of an Industrial Condenser for Lunar In-Situ Resource Utilization
- 15:00 to 15:30: Thermal Design of the Landing Gear and its Actuator on the Mars Sample Retrieval Lander

### *Active Thermal Presentation Session #5*

- 15:45 to 16:15: Dragonfly: Lander Thermal Controller Design
- 16:15 to 16:45: Dragonfly Lander Conjugate Heat Transfer Thermal Analysis: Computational Fluid Dynamics (CFD) Correlation of the Development Thermal Module (DTM) Thermal Test
- 16:45 to 17:15: Thermal Testing Strategy of Development Thermal Module for Dragonfly Lander