

## Thursday August 24<sup>th</sup>, 2023: Salon C

### *Passive Thermal Presentation Session #12*

None

### *Passive Thermal Presentation Session #13*

10:15 to 10:45: 3D Printed Wick Development for Loop Heat Pipes

10:45 to 11:15: Design and Testing of a Device for Moon Dust Deposition on Radiative Surfaces

11:15 to 11:45: Analytical Methods Used in the Design of Thermal Toolbox Elements for Extreme Environments

### *Passive Thermal Presentation Session #14*

13:30 to 14:00: Surviving Night at the Lunar South Pole: Exploring Viability of Radioisotope Power Systems for a Crewed Rover

14:00 to 14:30: Experimental Investigation of Capillary Performance of Additively-Manufactured Lattice Structures for Fluid Wicking Applications

## Thursday August 24<sup>th</sup>, 2023: Salon D

### *Aerosciences Presentation Session #1*

- 10:15 to 10:45: The SCIFLI Airborne Multispectral Imager (SAMI) Payload: New scientific instrument for spatial and radiometric testing of space vehicles with a VIS-NIR-SWIR-MWIR full motion video camera system
- 10:45 to 11:15: The SCIFLI Artemis 1 Observation Imaging Campaign
- 11:15 to 11:45: CFD simulations of the Effects of Thermo-Chemical Non-Equilibrium on Two Hypersonic re-Entry cases
- 11:45 to 12:15: Improving Aerodynamic Predictions of Mars Entry Vehicles Using Hybrid RANS/LES

### *Aerosciences Presentation Session #2*

- 13:30 to 14:00: Fabrication and Evaluation of A Five-hole Pitot tube
- 14:00 to 14:30: Computation of Approximate Stagnation Point Heat Flux in Hypersonic Flow at Any Mach Number and Altitude: A Python-Based Numerical Approach
- 14:30 to 15:00: ArcjetCV: a new machine learning application for extracting time-resolved recession measurements from arc jet test videos

### *Aerosciences Presentation Session #3*

- 15:45 to 16:15: Behavioural Analysis of Alumina-based Silicon Carbide as a Thermal Barrier Coating in Jet Engine
- 16:15 to 16:45: Hydrodynamics of Two-Phase Flows through Porous Media in Microgravity: Packed Bed Reactor Experiment onboard of the International Space Station
- 16:45 to 17:15: Examining Rapid Depressurization of Honeycomb Panels Using Computational Fluid Dynamics Through Anisotropic Porous Modeling
- 17:15 to 17:45: Aerodynamic Parameters of Aerofoils