

ROOM 1-B TECHNICAL SESSION SCHEDULE

Timeslot	Monday				Tuesday				Wednesday				Thursday				
10:30-10:50	Interdisciplinary 1 (Inter I)	Inter I - 01	Three-dimensional, Multi-Phase CFD Modeling using an Overset Mesh with Free Surface to Simulate Wave Impacts on the Outer Shell of a Spacecraft	William Dzedzic (NASA GSFC)	Thermal Control & Protection 4 (TC&P IV)	TC&P IV - 01	Megawatt-Scale Electrified Aircraft Thermal Management System Sizing	Erik Stalcup (NASA GSFC)	Cryogenics 1 (Cryo I)	Cryo I - 01	Understanding Surface Rise, Frothing, and Boil-over in Cryogenic Tanks	Mark A. Wollen (Inn Eng Sol)	Interdisciplinary 5 (Inter V)	Inter V - 01	Thermo-Elastic Antenna Depointing Analysis Workflow	Joel Gagnon (Maya HTT)	
10:50 - 11:10		Inter I - 02	Custom CFD and Digital Twin Frameworks for Thermo-Fluid System Optimization	Ender Demirel (SunMan Eng., Inc.)		TC&P IV - 02	Thermal Management Through Resonant Instability in Reduced Gravity Environments	Thomas Corbin (UFI)		Cryo I - 02	Modeling of Superheated Bubble Condensation in Subcooled Liquid for Liquid Hydrogen Boil-Off Gas Management	Mahmood H. Algeff (ZeroAvia)		Inter VI - 01	Characterization of Lunar Thermal Environments: Terrain Effects on Environmental Sink Temperature	Will Grier (NASA LaRC)	
11:10 - 11:30		Inter I - 03	Simulation of Time-Dependent Heat Transfer in Spherical Bubbles With Application to Bubble Through Nuclear Thermal Rocket Engines	Dakota J Santana (UAH)		TC&P III - 03	Atmospheric Waves Experiment (AWE) Thermal Control System: from Design through On-Orbit Thermal Performance	Mike Holt (SDL)		Cryo I - 03	Modeling complex cryogenic tank thermodynamics with simple spreadsheet tools	Mark A. Wollen (Inn Eng Sol)		Inter VI - 02	Thermal Systems Engineering for Nuclear Electric Propulsion High Temperature Radiator Arrays	Will Grier (NASA LaRC)	
11:30 - 11:50		Inter I - 04	Numerical Analysis On Tree-Shaped Disc Heat Convection	Derli Amaral (SHSU)		TC&P III - 04	Atmospheric Waves Experiment (AWE) Thermal Balance: Internal Characterization, Correlation, and Lessons Learned	Matt Ralphs (SDL)		Cryo I - 04	Validation of Stanton Number Correlation for Jet Mixing and Its Extension to Microgravity Filling Operations	Hong Q Yang (NASA MSFC)					
1:30 - 1:50	Interdisciplinary 2 (Inter II)	Inter II - 01	Characterization of Spacecraft Thruster Plumes via Augmented View Factor Methods for Spacecraft Docking Interactions	Anthony C Terracciano (NASA KSC)	Thermal Control & Protection Special ECF/ESI session	TC&P ECF	Early Career Faculty Seminar: Ionic liquids for pumped fluid loop applications	Sadaf Sobhani (Cornell)	Cryogenics 2 (Cryo II)	Cryo II - 01	Computational Fluid Dynamics Analysis of LOX-Methane Mixing within Confined Cylindrical Volume	Kevin Chibar (NASA KSC)					
1:50 - 2:10		Inter II - 02	Microgravity Experiment for Lunar Dust (MELD): A platform to study lunar dust interactions with surfaces.	Samantha Daigle (TWU)		TC&P ESI	Early Stage Innovation Seminar: Additive manufacturing of ceramic heat pipes	Sadaf Sobhani (Cornell)		Cryo II - 02	Hydrophobicity of surface coatings for cryogenic liquid storage and transfer in microgravity environments	Ethan Paulsen (UN Texas)					
2:10 - 2:30		Inter II - 03	Methods for Modeling Lunar Dust in Thermal Desktop Based on Lunar Dust Level Sensor and Effects on Surfaces Test Data	Jessie Beddoe (NASA JSC)						Cryo II - 03	Preliminary CFD Simulations of a Cryogenic Film Condensation Experiment	Justin Pesich (NASA JSC)					
2:30 - 2:50		Inter II - 04	Simcenter System Simulation for Space Systems Design and Electrified Rocket Development	Darren Nunes (Siemens)													
3:30 - 3:50	Interdisciplinary 3 (Inter III)	Inter III - 01	Thermal Modeling of an ESPA-Class Satellite with OHP and DSABR Architecture: A Comparative Study Using Thermal Desktop and ThermoQuik	Kevin R Anderson (CPP)	Interdisciplinary 4 (Inter IV)	Inter IV - 01	Thermal Effects of Scene-Based, Lunar Alignment for a Hyperspectral Earth Observation Telescope in Low Earth Orbit	Geneva Vandervinne (Wyvern)	Aerosciences 7 (Aero VII)	Aero VII - 02	Rarefied Gas-Dynamic Simulations for Moon Exploration	Stefano Boccelli (NASA GSFC)					
3:50 - 4:10		Inter III - 02	Thermal Performance Evaluation of IPEX via Dynamic Modeling with Thermal Desktop and SINDA	Kevin R Anderson (CPP)		Inter IV - 02	The Effect Of Changing The Thickness Of VO2 Thin Films On Emissivity For Passive Thermal Control On Spacecrafts	Jiajun Xu (UDC)		Aero VII - 03	MD-Informed CLL Gas-Surface Interaction Kernel for LEO/VLEO Atmospheres	Ahlan Appar (UKy)					
4:10 - 4:30		Inter III - 03	Metasurface-Engineered Anode for Solid Oxide Electrolysis Cells	Victoria Kurushina (IU of Tyumen)		Inter IV - 03	Harassing Thermoacoustic Power with Bi-Directional Turbines: A Path to Efficient Energy Conversion	Luis A Rodriguez (NASA GSFC)		Aero VII - 04	Investigation of Non-Equilibrium Structures in Inert Hypersonic Shock Waves with the Twenty-Moment Equations	Ethan Rice (U Ottawa)					
4:30 - 4:50		Inter III - 04	Speeding Up Model Correlation With Breakout Models: The Viper Integrated Thermal Model Correlation Story	Lisa Erickson (NASA JSC)						Aero VII - 01	Toolbox for Characterizing Uncertainty in Aerodynamic Coefficients of Space Launch Vehicles	Avery N. White (U of A)					

[]