

ROOM 1-A TECHNICAL SESSION SCHEDULE

Timeslot	Monday				Tuesday				Wednesday				Thursday			
10:30-10:50	Aerosciences 1 (Aero I)	Aero I - 01	General-Purpose Machine-Learning Closure Model for Wall-Modeled LES	Adrian Lozano Duran (Caltech/MIT)	Aerosciences 4 (Aero IV)	Aero IV - 01	Recent Advances in Aeroheating and Thermal Protection System Material Response in the NASA Entry Systems Modeling Project	Justin Haskins (NASA ARC)	Thermal Control & Protection - ITAR	TC&P ITAR - 01	Using SINDA/Fluint for Modeling of Spacecraft Thermal Capacitance	Steven Thornton (NASA JSC)	Thermal Control & Protection 14 (TC&P XIV)	TC&P XIV - 01	Injector Experiment Simulation and Experiment Design for Centrifugal Nuclear Thermal Rocket Engine	Timothy Blackman (UAH)
10:50 - 11:10				Tarun Prabash (RV College of Engineering)		Aero IV - 02	Exploring the Accuracy of CFD Predictions for the Wake of a Hypersonic Inflatable Aerodynamic Decelerator	Clark Pederson (NASA LaRC)		TC&P ITAR - 03	Dragonfly Multi-Mission Radioisotope Thermoelectric Generator Secondary Cooling Chiller Cart	Joshua Hess (APL)		TC&P XIV - 03	Thermal Considerations For 2039 Opposition Class Nuclear Electric Propulsion/Chemical Propulsion Crewed Mars Mission	Tai Valdes (NASA LaRC)
11:10 - 11:30		Aero I - 02	Aerodynamic & Thermo-Chemical Analysis of Blended Haack-Ogive Nose Cones Across Earth & Martian Atmospheres			Aero IV - 03	Transport-Equations-Based Transition Models for Three-Dimensional High-Speed Flows	Ethan Vogel (NASA LaRC)		TC&P ITAR - 04	Air Force Research Laboratory (AFRL)'s Thermal Roadmap for Space: Enabling the US Space Force	Columbia Mishra (Space Force)				
11:30 - 11:50						Aero IV - 04	Wake Heating Environments on a HIAD Aeroshell using Unstructured CFD	Adam Wise (NASA LaRC)								
1:30 - 1:50	Aerosciences 2 (Aero II)	Aero II - 01	Early Career Faculty Seminar: Roughness induced transition for hypersonic	Robyn L. Macdonald (U.C. Boulder)	Aerosciences 5 (Aero V)	Aero V - 01	A Reimagining of NASA's DPLR Code	Joshua Finkbeiner (NASA GRC)	Thermal Control & Protection 10 (TC&P X)	TC&P X - 01	A Study of TPS Defects using a One-Domain Porous Media Model	Brandon van Gogh (Stanford)				
1:50 - 2:10				Andrea Fagnani (ORAU at NASA ARC)		Aero V - 02	Gas-Surface Interaction Models in CFD++	Bruno Lopez (Metacomp)		TC&P X - 02	An Upscaled Continuum Framework with Improved Force Closure For Flow over Heterogeneous Porous Structures	Daniel Fust (Oregon State)				
2:10 - 2:30		Aero II - 02	Demonstration of Broadband Absorption Spectroscopy of CN(X2+→B2+) in the Low Density Electric Arc Shock Tube			Aero V - 03	BLAST: Boundary Layer Analysis & Simulation Tool for Reacting Nonequilibrium Flows	Domenico Lanza (UIUC)		TC&P X - 03	Phenolic Resin Thermal Response and Fracture in a Bonded-Particle Model	Andrew Santos (NASA ARC)				
2:30 - 2:50						Aero V - 04	Aerothermodynamics of a General One-Dimensional Compressible Flow in a Duct with Area Change, Friction, Heat Transfer, Rotation, Internal Choking, and Normal Shocks: Modeling and Solution	Bijay Sultanian (TAKANIKI)		TC&P X - 04	Assessing HALO Radiator Thermal Coatings: Testing and Validation of Natural and Induced Environments	Aidan Svoboda (NASA JSC)				
3:30 - 3:50	Aerosciences 3 (Aero III)	Aero III - 01	Dragonfly: Entry, Descent, and Landing - Thermal Environment and Analysis Approach	Evan Cosentino (APL)	Aerosciences 6 (Aero VI)	Aero VI - 02	A Flight-to-Ground Mapping Strategy to Reproduce Entry Trajectory Conditions in ICP Facilities	Andrea Scabro (UIUC)	Thermal Control & Protection 12 (TC&P XII)	TC&P XII 01	Thermochromic variable emissivity material thermal modeling and test correlation	Derek Hengeveld (Redwire)				
3:50 - 4:10		Aero III - 02	Dragonfly Mission Launch Failure Analysis Aerothermal Database Development.	Christopher Naughton (NASA ARC)		Aero VI - 03	Boundary Layer Characterization around Graphite Samples in Microwave Nitrogen-Methane Plasmas	Dan Fries (UKy)		TC&P XII 02	Unsteady Measurements of Ultra-Low Permeability in Thermal Protection System Materials	Michael Renfro (UKy)				
4:10 - 4:30		Aero III - 03	Modular Trajectory Simulation Architecture for Aerocapture and Skip out Maneuvers	Bokdan Wesely (NASA ARC)		Aero VI - 04	Approximate Method for Comparing NEQAIR Visible Spectral Emission Predictions Against Onboard Footage	Heston Briant (NASA KSC)		TC&P XII 03	Thermal Conductivity Analysis of the Carbon Ablator FiberForm and FRCI: An Experimental Approach	Juan Rengifo (Boise State)				
4:30 - 4:50		Aero III - 04	Preliminary Thermal Design of Airborne EO/IR Pods and Bays Based on CONOPS and Flight Envelope	Mark Whittum (Raytheon Technologies)		Aero VI - 01	Rovibrational-specific OCT and master equation analysis on the CNO system for high-energy collisions	Clement Civrais (UCI)		TC&P XII 04	SPIRRAL: A Calorimetric Testbed for Characterizing Variable Emissivity Materials in Space	Isaac Foster (AFRL)				