Tuesday, July 9

A1	1	I.1	Science Instrumentation, Experiments, and In-Situ Measurements	Science Instrumentation, Experiments, and In-Situ Measurements	INES-a flexible and innovative payload for measuring radiation in the presence of ablation	Gilles Bailet	CentraleSupélec	
A2	2	I.2	Science Instrumentation, Experiments, and In-Situ Measurements	Science Instrumentation, Experiments, and In-Situ Measurements	Laboratory-Based Thermal Shock Investigation of Heat Flux Sensors for the Mars 2020 Backshell	Ruth Miller	AMA Inc. at NASA Ames Research Center	
A3	3	I.3	Science Instrumentation, Experiments, and In-Situ Measurements	Science Instrumentation, Experiments, and In-Situ Measurements	The LONSCAPE (Light Optical Nephelometer Sizer and Counter for Aero-sols in Planetary Environments) instrument: concept and application for the in situ detection of liquid and solid particles	Jean-Baptiste Renard	LPC2E-CNRS	
A4	4	I.4	Science Instrumentation, Experiments, and In-Situ Measurements	Science Instrumentation, Experiments, and In-Situ Measurements	GeMini Plus: Preparing the Way for Future Planetary Elemental Composition Measurements Throughout the Solar System Using Gamma-Ray Spectroscopy	John Goldsten	Johns Hopkins Applied Physics Laboratory	
A5	5	I.5	Science Instrumentation, Experiments, and In-Situ Measurements	Science Instrumentation, Experiments, and In-Situ Measurements	High Temperature Operation of Gallium Nitride Hall-Effect Sensors	Hannah Alpert	Stanford University	Student
A6	6	I.6	Science Instrumentation, Experiments, and In-Situ Measurements	Science Instrumentation, Experiments, and In-Situ Measurements	An Energetic Particle Monitor for Ice Giant Atmospheric Probes	Nicolas Andre	IRAP, CNRS, UPS, CNES	
A7	7	I.7	Science Instrumentation, Experiments, and In-Situ Measurements	Science Instrumentation, Experiments, and In-Situ Measurements	Radio Science from Venus Probe/Lander Mission	Robert Frampton	Boeing	
A8	8	II.1	Mars Exploration	Mars Exploration	InSight's Reconstructed Aerothermal Environments	Jarvis Songer	Lockheed Martin Space	
A9	9	II.2	Mars Exploration	Mars Exploration	Reconstruction of the Performance of Mars InSight Lander's Supersonic Parachute	Ian Clark	Jet Propulsion Laboratory, California Institute of Technology	
A10	10	II.3	Mars Exploration	Mars Exploration	Landing Radar Performance Reconstruction for Entry, Descent, and Landing of the InSight Mars Lander	Dave Eckart	Lockheed Martin Space	
A11	11	II.4	Mars Exploration	Mars Exploration	InSight Entry, Descent and Landing Operations Overview	Julie Wertz Chen	Jet Propulsion Laboratory, California Institute of Technology	
A12	12	II.5	Mars Exploration	Mars Exploration	InSight Entry, Descent, And Landing Post-Flight Simulation Assessment	Carlie Zumwalt	NASA Langley Research Center	
A13	13	II.6	Mars Exploration	Mars Exploration	InSight Landing Safety Assessment During Approach	Evgeniy Sklyanskiy	Jet Propulsion Laboratory, California Institute of Technology	
A14	14	II.7	Mars Exploration	Mars Exploration	Trajectory Analysis of the ExoMars Schiaparelli Descent Probe	Emma Johnstone	Fluid Gravity engineering	
A15	15	II.8	Mars Exploration	Mars Exploration	Challenges For Mars 2020 EDL At The Jezero Crater Landing Site	Erisa Stilley	Jet Propulsion Laboratory, California Institute of Technology	
A16	16	II.9	Mars Exploration	Mars Exploration	AMELIA: The EDL Science Experiment For The Entry And Descent Module Of The EXOMARS 2020 Mission	Francesca Ferri	CISAS - Univ. Padova	
A17	17	II.10	Mars Exploration	Mars Exploration	Modelling Sensitivities and Knowledge Gaps Associated with Mars-atmosphere Destructive Entry Applied to Planetary Protection	James Merrifield	Fluid Gravity engineering	
A18	18	II.11	Mars Exploration	Mars Exploration	Aerothermal Analysis and Thermal Protection System [TPS] Design of the Mars Sample Retrieval Lander [SRL] Concept	Suman Muppidi	AMA Inc. at NASA Ames Research Center	
A19	19	II.12	Mars Exploration	Mars Exploration	ExoMars Rover and Surface Platform Mission: Technical Status	Andrew Ball	European Space Agency ESTEC	
A20	20	III.1	Sample Return to Earth	Sample Return to Earth	A Dynamic Topology Optimization Method for Sizing Internal Components of the Potential Mars Sample Return Earth Entry Vehicle	Cameron Grace	University at Buffalo	Student
A21	21	III.2	Sample Return to Earth	Sample Return to Earth	Implementing CubeSat Avionics Components to Full-Scale Capsule Return Missions	Zachary Hughes	San Jose State University	Student
A22	22	III.3						
A23	23	III.4	Sample Return to Earth	Sample Return to Earth	Structural Analysis of Impact-Tolerant Latched Containment Mechanisms for Mars Sample Return	Emma Shupper	Jet Propulsion Laboratory, California Institute of Technology	
A24	24	III.5	Sample Return to Earth	Sample Return to Earth	High Velocity Impact Performance of a Dual Layer Thermal Protection System for the Mars Sample Re-turn Earth Entry Vehicle.	Benjamin Libben	NASA Ames Research Center	
A25	25	IV.1	Innovative Concepts for Exploration	Innovative Concepts for Exploration	TOUTATIS-Ex: A CubeSat testbed for entry experiments on Mars	Chloe Gentgen	CentraleSupélec	Student
A26	26	IV.2	Innovative Concepts for Exploration	Innovative Concepts for Exploration	Lunar Gateway LASC Module for Innovative Concepts for Exploration: A Laser-powered Apparatus for Satellite Charging	Brandon Biggs	San Jose State University	Student
A27	27	IV.3	Innovative Concepts for Exploration	Innovative Concepts for Exploration	Virtual Validation and Verification of the VaMEx Initative	Philipp Dittmann	University of Bremen	Student
A28	28	IV.4	Innovative Concepts for Exploration	Modeling, Simulation, Testing, and Validation	Aerodynamic heating estimation of deployable inflatable aeroshell for Martian penetrator entry system	Tomoya Kazama	Tokyo University of Science	Student
A29	29	IV.5	Innovative Concepts for Exploration	Modeling, Simulation, Testing, and Validation	Modal Analysis of the Orion Capsule Two Parachute System	Jing Pei	NASA Langley Research Center	
A30	30	IV.6	Innovative Concepts for Exploration	Modeling, Simulation, Testing, and Validation	Multi-Fidelity Modeling for Efficient Aerothermal Prediction of HIAD Configurations with Surface Scalloping	Mario Santos	Missouri University of Science and Technology	Student
A31	31	IV.7	Innovative Concepts for Exploration	Modeling, Simulation, Testing, and Validation	Deployable Mars Aero-Decelerators: Rib Deformation Modelling and Testing	Lisa Peacocke	Imperial College London / Airbus	Student
A32	32	IV.8	Innovative Concepts for Exploration	Modeling, Simulation, Testing, and Validation	Modeling Thermal and Fluid Response of MMOD Impacted Thermal Protection Systems	Olivia Schroeder	University of Minnesota	Student
A33	33	IV.9	Innovative Concepts for Exploration	Solar System Exploration II - Airless Planetary Satellites, Asteroids, and Comets	Enceladus Lander Mission Concept	Leora Peltz	Boeing	

Thursday, July 11

Order	Poster Location	1-min Order	1-min Presentation before what session	Part of Which Session	Title	Name	Affiliation	Status
B1	1	V.1	Solar System Exploration I - Mercury, Venus, Giant Planets, and Titan	Solar System Exploration I - Mercury, Venus, Giant Planets, and Titan	Altitude Control Balloon Testbed For Planetary Atmospheres	Jasper Thomas	Camosun College	Student
B2	2	V.2	Solar System Exploration I - Mercury, Venus, Giant Planets, and Titan	Solar System Exploration I - Mercury, Venus, Giant Planets, and Titan	Investigation Of Suggested Atmospheric Microbes On Venus And Similarities With Earth's Atmosphere.	Denise Lainez	San Jose State University	Student
B3	3	V.3	Solar System Exploration I - Mercury, Venus, Giant Planets, and Titan	Solar System Exploration I - Mercury, Venus, Giant Planets, and Titan	Venus Cloud Village: An EDL Sequence For Bringing Humans To The Venusian Atmosphere	Stephen Hunt	University of Southern California	Student
B4	4	V.4	Solar System Exploration I - Mercury, Venus, Giant Planets, and Titan	Solar System Exploration I - Mercury, Venus, Giant Planets, and Titan	A Compact, Versatile Net Flux Radiometer For Ice Giant Probes.	Shahid Aslam	NASA Goddard Space Flight Center	
B5	5	V.5	Solar System Exploration I - Mercury, Venus, Giant Planets, and Titan	Solar System Exploration I - Mercury, Venus, Giant Planets, and Titan	Science Drivers And Measurement Targets For The In-Situ Study Of Venus' Unidentified Cloud Absorber	Kandi Jessup	Southwest Research Institute	
B6	6	V.6	Solar System Exploration I - Mercury, Venus, Giant Planets, and Titan	Solar System Exploration I - Mercury, Venus, Giant Planets, and Titan	Latitudinal variation in abundance of hydrogen sulphide and methane in the atmospheres of Uranus and Neptune: Implication for future entry probes	Patrick Irwin	University of Oxford	
B7	7	V.7	Solar System Exploration I - Mercury, Venus, Giant Planets, and Titan	Solar System Exploration I - Mercury, Venus, Giant Planets, and Titan	Investigation of Aerocapture G&C for Ice Giants Missions	Benjamin Tackett	AMA Inc. at NASA Langley Research Center	
B8	8	V.8	Solar System Exploration I - Mercury, Venus, Giant Planets, and Titan	Solar System Exploration I - Mercury, Venus, Giant Planets, and Titan	The Annwn Probe: A Scalable Titan Mission Concept for Tracking the Hydrocarbon Cycle	David Davies	UCL/MSSL	Student
B9	9	VI.1	Entry, Descent, and Landing Technologies	Entry, Descent, and Landing Technologies	SERENADE-Ex: an entry capsule designed to characterize the Martian atmosphere and to provide flight data	Tanguy Krzymuski	CentraleSupélec	Student
B10	10	VI.2	Entry, Descent, and Landing Technologies	Entry, Descent, and Landing Technologies	AeroDrop: Dual Aerocapture-Entry Architecture for Multiple Spacecraft Missions	Samuel Albert	University of Colorado, Boulder	Student
B11	11	VI.3	Entry, Descent, and Landing Technologies	Entry, Descent, and Landing Technologies	Obstacle Avoidance With Sequential Convex Optimal Powered Descent Guidance	Padraig Lysandrou	University of Colorado, Boulder	Student
B12	12	VI.4	Entry, Descent, and Landing Technologies	Entry, Descent, and Landing Technologies	Optimal Lift and Drag Modulation Hypersonic Control Options for High Ballistic Coefficient Entry Vehicles at Mars	Nicklaus Richardson	University of Illinois at Urbana-Champaign	Student
B13	13	VI.5	Entry, Descent, and Landing Technologies	Entry, Descent, and Landing Technologies	Atmospheric Neural Net Application To Martian Entry, Descent, And Landing	Shayna Hume	University of Colorado, Boulder	Student
B14	14	VI.6	Entry, Descent, and Landing Technologies	Entry, Descent, and Landing Technologies	Deployable Martian Aero-Decelerators: Design Of A Novel TPS Folding Concept	Danielle O'Driscoll	Imperial College London	Student
B15	15	VI.7	Entry, Descent, and Landing Technologies	Entry, Descent, and Landing Technologies	Analytical Assessment Of Hypersonic Separation Dynamics For Drag Modulation Systems.	Michelle McClary	University of Illinois at Urbana-Champaign	Student
B16	16	VI.8	Entry, Descent, and Landing Technologies	Entry, Descent, and Landing Technologies	Supersonic Retro-Propulsion For Launch Vehicle Stage Recovery And Entry, Descent And Landing Applications.	Kieran Montgomery	Imperial College London	Student
B17	17	VI.9	Entry, Descent, and Landing Technologies	Entry, Descent, and Landing Technologies	An Accessory Minimization Problem for Robust Numerical Predictor-Corrector Aerocapture Guidance	Casey Heidrich	University of Colorado, Boulder	Student
B18	18	VI.10	Entry, Descent, and Landing Technologies	Entry, Descent, and Landing Technologies	Operations Plans for the LOFTID 6-meter HIAD Flight Demonstration	Robert Dillman	NASA Langley Research Center	
B20	20	VI.12	Entry, Descent, and Landing Technologies	Entry, Descent, and Landing Technologies	Analysis of Tip-Off Rates During Discrete-Event Drag Modulation for Venus Aerocapture	Annika Rollock	University of Colorado, Boulder	
B21	21	VI.13	Entry, Descent, and Landing Technologies	Entry, Descent, and Landing Technologies	Flight Control Techniques for Optimal Aerocapture Guidance	Rohan Deshmukh	Purdue University	Student
B22	22	VII.1	Solar System Exploration II - Airless Planetary Satellites, Asteroids, and Comets	Solar System Exploration II - Airless Planetary Satellites, Asteroids, and Comets	Science investigations of small solar system bodies with a landed CubeSat platform	Ozgur Karatekin	Royal Observatory of Belgium	
B23	23	VII.2	Solar System Exploration II - Airless Planetary Satellites, Asteroids, and Comets	Solar System Exploration II - Airless Planetary Satellites, Asteroids, and Comets	Icy Moon Sub-Surface Probe Radioisotope Heat Source Considerations	Daniel Kramer	University of Dayton	
B24	24	VII.3	Solar System Exploration II - Airless Planetary Satellites, Asteroids, and Comets	Solar System Exploration II - Airless Planetary Satellites, Asteroids, and Comets	Sample Return from a Relic Ocean World: the Calathus Mission to Occator Crater, Ceres	Lucy Kissick	University of Oxford	Student
B25	25	VII.4	Solar System Exploration II - Airless Planetary Satellites, Asteroids, and Comets	Modeling, Simulation, Testing, and Validation	Maturation of Heatshield for Extreme Entry Environment Technology (HEEET) through Extreme Aero-thermal Ground Testing at Arnold Engineering Development Complex (AEDC).	Joseph Williams	AMA Inc. at NASA Ames Research Center	
B26	26	VII.5	Solar System Exploration II - Airless Planetary Satellites, Asteroids, and Comets	Modeling, Simulation, Testing, and Validation	Heatshield Entry Modeling Using A Design, Analysis, And Optimization Toolbox	Jeremie Meurisse	STC at NASA Ames Research Center	
B27	27	VII.6	Solar System Exploration II - Airless Planetary Satellites, Asteroids, and Comets	Modeling, Simulation, Testing, and Validation	Hypersonic Flows in Thermochemical Nonequilibrium with Immersed Boundary Method and Adaptive Mesh Refinement	Monal Patel	Imperial College London	Student
B28	28	VII.7	Solar System Exploration II - Airless Planetary Satellites, Asteroids, and Comets	Modeling, Simulation, Testing, and Validation	Comparison of Chemical Kinetic Models for Aerothermal Simulations of Entry into Gas Giants	Alex Carroll	University of Michigan - Ann Arbor	Student
B29	29	VII.8	Solar System Exploration II - Airless Planetary Satellites, Asteroids, and Comets	Modeling, Simulation, Testing, and Validation	Commissioning of the Oxford T6 Stalker Tunnel in Reflected Shock Tunnel Mode	Suria Subiah	University of Oxford	Student
B30	30	VII.9	Solar System Exploration II - Airless Planetary Satellites, Asteroids, and Comets	Modeling, Simulation, Testing, and Validation	Status Of Global Reference Atmospheric Model (GRAM) Upgrades	Hilary Justh	NASA Marshall Space Flight Center	
B31	31	VII.10	Solar System Exploration II - Airless Planetary Satellites, Asteroids, and Comets	Modeling, Simulation, Testing, and Validation	Development of Patch Integral Method for Hypersonic Thermal Imaging Analysis	Jon Cheatwood	Virginia Tech	Student
B32	32	VII.11	Solar System Exploration II - Airless Planetary Satellites, Asteroids, and Comets	Modeling, Simulation, Testing, and Validation	DSMC Simulation Of Hypersonic Flow Over TPS Microstructures	Sahadeo Ramjatan	University of Minnesota	Student