

Monday, 12 July 2021

10:00 (CEST)	CHAIR'S WELCOME		Lobby
--------------	------------------------	--	-------

10:10 (CEST)	TECHNICAL SESSIONS		
	<ul style="list-style-type: none">Thermal Design of Microsatellites, Nanosatellites, and PicosatellitesBioregenerative Life SupportSpace Architecture	<i>ICES107-A</i> <i>ICES204-A</i> <i>ICES502-A</i>	Kibo Harmony Unity

11:30 (CEST)	Lobby BREAK		Lobby
--------------	-------------	--	-------

11:40 (CEST)	TECHNICAL SESSIONS		
	<ul style="list-style-type: none">Thermal TestingSpace Architecture	<i>ICES203-A</i> <i>ICES502-B</i>	Kibo Unity

13:00 (CEST)	Extended Work/Meal BREAK		
--------------	--------------------------	--	--

14:20 (CEST)	CHAIR'S WELCOME		Lobby
--------------	------------------------	--	-------

14:30 (CEST)	TECHNICAL SESSIONS		
	<ul style="list-style-type: none">Thermal Control of High Altitude Balloon SystemsPhysio-Chemical Life Support- Water Recovery & Management Systems- Technology and Process DevelopmentSpace Architecture	<i>ICES109</i> <i>ICES303-A</i> <i>ICES502-C</i>	Kibo Tranquility Unity

15:50 (CEST)	Lobby BREAK		Lobby
--------------	-------------	--	-------

16:00 (CEST)	KEYNOTE SPEAKER – <i>Didier Schmitt (ESA)</i>		Artemis
--------------	--	--	---------

17:00 (CEST)	Lobby BREAK		
--------------	-------------	--	--

17:10 (CEST)	TECHNICAL SESSIONS		
	<ul style="list-style-type: none">Thermal Design of Microsatellites, Nanosatellites, and PicosatellitesBioregenerative Life SupportEnvironmental Control & Life Support Systems (ECLSS) Modeling and Test CorrelationsPhysio-Chemical Life Support- Water Recovery & Management Systems- Technology and Process DevelopmentInternational Space Station ECLS: SystemsSpace ArchitectureHuman Exploration Beyond Low Earth Orbit: Missions and Technologies	<i>ICES107-B</i> <i>ICES204-B</i> <i>ICES300-A</i> <i>ICES303-B</i> <i>ICES404</i> <i>ICES502-D</i> <i>ICES506-A</i>	Kibo Harmony Zvezda Tranquility Quest Unity Cupola

18:50 (CEST) Extended Work/Meal BREAK

20:20 (CEST) **TECHNICAL SESSIONS**

- Thermal Testing *ICES203-B* Kibo
- Physio-chemical Life Support- Air Revitalization Systems -Technology and Process Development *ICES302-A* Tranquility
- Environmental and Thermal Control of Commercial and Exploration Spacecraft *ICES305* Destiny
- Extravehicular Activity: Space Suits *ICES400-A* Quest
(*shared session with*)
- Extravehicular Activity: Systems *ICES401* Quest
- Space Architecture *ICES502-E* Unity

21:40 (CEST) **AIAA JEFFRIES AWARD**

Lobby

21:50 (CEST) **TECHNICAL SESSIONS**

- Thermal Control for Space Launch Vehicles, Propulsion, and Nuclear Power Systems *ICES106* Kibo
- Physio-chemical Life Support- Air Revitalization Systems -Technology and Process Development *ICES302-B* Tranquility
- Extravehicular Activity: Space Suits *ICES400-B* Quest

23:10 (CEST) Lobby BREAK

Lobby

23:20 (CEST) **TECHNICAL SESSIONS**

- Thermal and Environmental Control of Exploration Vehicles and Habitats *ICES103* Columbus
- Thermal Control of Cryogenic Instruments and Optical Systems *ICES108* Kibo
- Environmental Control & Life Support Systems (ECLSS) Modeling and Test Correlations *ICES300-B* Zvezda
(*shared session with*)
- Advanced Life Support Systems Control *ICES301* Zvezda
- Physio-chemical Life Support- Air Revitalization Systems -Technology and Process Development *ICES302-C* Tranquility
- Advanced Technologies for In-Situ Resource Utilization *ICES308-A* Destiny
- Extravehicular Activity: Space Suits *ICES400-C* Quest
- Life Support Systems Engineering and Analysis *ICES501* Zarya
- Human Exploration Beyond Low Earth Orbit: Missions and Technologies *ICES506-B* Cupola

Tuesday, 13 July 2021

10:00 (CEST) Lobby OPENS Lobby

10:10 (CEST) **TECHNICAL SESSIONS**

- Advances in Thermal Control Technology *ICES104-A* Kibo
- Satellite, Payload, and Instrument Thermal Control *ICES202-A* Columbus
(*shared session with*)
- Crewed Orbiting Infrastructures, Habitats, Space Station and Payload Thermal Control *ICES206* Columbus

11:30 (CEST) Extended Work/Meal BREAK

14:20 (CEST) Lobby OPENS Lobby

14:30 (CEST) **TECHNICAL SESSIONS**

- Two-Phase Thermal Control Technology *ICES201-A* Kibo
- Satellite, Payload, and Instrument Thermal Control* *ICES202-B* Columbus
(*late start @ 15:10 hrs*)
- Physio-Chemical Life Support- Water Recovery & Management Systems- Technology and Process Development *ICES303-C* Tranquility
- Advanced Technologies for In-Situ Resource Utilization *ICES308-B* Destiny

15:50 (CEST) Lobby BREAK Lobby

16:00 (CEST) **PANEL SESSION:** Artemis

Lunar Nomads vs. Settlers: What's next... and what does it take?

This panel, moderated by Lindsay Aitchison, will discuss and debate the technologies, logistics, habitation, and mission impacts and differences between short-term human missions to the lunar surface and a sustainable lunar community with human and robotic assets. Perspectives from government, academia and industry will inform the discussion on how to live, thrive, and use in situ resources on the moon. Panelists will also discuss their vision for a timeline in which a lunar village can be established, and the technologies needed to make it possible.

18:00 (CEST) Lobby BREAK Lobby

18:10 (CEST) **TECHNICAL SESSIONS**

- Spacecraft and Instrument Thermal Systems *ICES101* Columbus
- Two-Phase Thermal Control Technology *ICES201-B* Kibo
- Advanced Life Support Sensor and Control Technology *ICES205* Harmony
- Physio-Chemical Life Support- Water Recovery & Management Systems- Technology and Process Development *ICES303-D* Tranquility
- Advanced Technologies for In-Situ Resource Utilization *ICES308-C* Destiny
- Extravehicular Activity: PLSS Systems *ICES402-A* Quest
- Life Science/Life Support Research Technologies* *ICES500* Unity
(*will go long ending @ 19:50 hrs – 5 papers*)

19:30 (CEST) Extended Work/Meal BREAK

21:00 (CEST) **TECHNICAL SESSIONS**

- Advances in Thermal Control Technology *ICES104-B* Kibo
- Physio-chemical Life Support- Air Revitalization Systems -Technology and Process Development *ICES302-D* Zvezda
- Physio-Chemical Life Support- Water Recovery & Management Systems- Technology and Process Development *ICES303-E* Tranquility
- Extravehicular Activity: PLSS Systems *ICES402-B* Quest

22:20 (CEST) Lobby BREAK Lobby

22:30 (CEST) **TECHNICAL SESSIONS**

- Advances in Thermal Control Technology *ICES104-C* Kibo
- Physio-chemical Life Support- Air Revitalization Systems -Technology and Process Development *ICES302-E* Zvezda
- Physio-Chemical Life Support- Water Recovery & Management Systems- Technology and Process Development *ICES303-F* Tranquility
- Reliability for Space Based Systems *ICES511* Unity

****ALL TIMES ARE IN (CEST) Central European Summer Time = GMT+2**

Wednesday, 14 July 2021

10:00 (CEST) Lobby OPENS Lobby

10:10 (CEST) **TECHNICAL SESSIONS**

- Two-Phase Thermal Control Technology *ICES201-C* Kibo
- Thermal and Environmental Control Engineering Analysis and Software *ICES207-A* Columbus

11:30 (CEST) Lobby BREAK Lobby

11:40 (CEST) **TECHNICAL SESSIONS**

- Two-Phase Thermal Control Technology *ICES201-D* Kibo

13:00 (CEST) Extended Work/Meal BREAK

14:40 (CEST) **TECHNICAL SESSIONS**

- Thermal and Environmental Control Engineering Analysis and Software *ICES207-B* Columbus
- Collaboration, Education Outreach, and Public Engagement *ICES307-A* Tranquility

16:00 (CEST) **ICES 2021 AWARDS** Lobby

16:20 (CEST) **TECHNICAL SESSIONS**

- Two-Phase Thermal Control Technology *ICES201-E* Kibo
- Thermal and Environmental Control Engineering Analysis and Software *ICES207-C* Columbus
- Physio-Chemical Life Support- Waste Management Systems- Technology and Process Development *ICES304-A* Zvezda
- Collaboration, Education Outreach, and Public Engagement *ICES307-B* Tranquility
- Extravehicular Activity: Operations *ICES403-A* Quest
- Fire Safety in Spacecraft and Enclosed Habitats *ICES509-A* Unity
- Planetary and Spacecraft Dust Properties and Mitigation Technologies *ICES510-A* Zarya
- Computational Modeling for Human Health and Performance Analysis *ICES513* Cupola

17:40 (CEST) **ICES 2022 REVEAL** Lobby

18:00 (CEST)

TECHNICAL SESSIONS

- Thermal Control for Planetary and Small Body Surface Missions *ICES102* Kibo
- Physio-Chemical Life Support- Waste Management Systems- Technology and Process Development *ICES304-B* Zvezda
- Extravehicular Activity: Operations *ICES403-B* Quest
- Fire Safety in Spacecraft and Enclosed Habitats *ICES509-B* Unity
- Planetary and Spacecraft Dust Properties and Mitigation Technologies *ICES510-B* Zarya

19:40 (CEST)

ICES 2021 STUDENT POSTER AWARDS

Lobby

19:50 (CEST)

TECHNICAL SESSIONS

- Physio-Chemical Life Support- Waste Management Systems- Technology and Process Development *ICES304-C* Zvezda
- Human/Robotics System Integration *ICES405* Quest
- Radiation Issues for Space Flight *ICES503* Unity