

Tuesday, October 7th, 2025

8:00

REGISTRATION DESK

AUDITORIUM

9:00

Opening Ceremony

Chloé AUDAS (MELiSSA Project Manager, ESA)

Dietmar PILZ (Director of Technology, Engineering and Quality, ESA)

Stefaan DE MEY (Strategy Team Lead, ESA)

Geraldine NAJA (Director of Commercialisation, Industry and Procurement, ESA)

Juan CARLOS CORTÉS (Director of the Spanish Space Agency, AEE)

Sara GARCÍA ALONSO (Reserve Astronaut, ESA)

10:30

Keynote Lecture

From Low Earth Orbit to the Moon and Mars Horizons: The Evolution of Habitats and Life Support System

Cesare LOBASCIO (Space Exploration and Science Innovation Lead, Thales Alenia Space, Italy)

11h15

COFFEE BREAK

AUDITORIUM

FARADAY

CINE 3

11:45

Track 1: Eating and Breathing in Space

1.1 Air Revitalisation

Chairs: Carolina Arnau Jimenez (Universitat Autònoma de Barcelona), Fazil Uslu (Beyond Gravity)

Track 2: Valorising Wastes, Recovering Water and Drinking in Space

2.1 Waste Management, Recycling and Valorisation

Chairs: Brigitte Lamaze (ESA), Dries Demey (Red Wire)

Track 3: Paving the Path to Circular Systems for Space and Earth

3.1 Advanced Life Support Systems Modelling, Simulation and Control

Chairs: Philippe Fiani (Sherpa Engineering), Eric Landel (Eric Landel Consulting)

13:30

LUNCH

AUDITORIUM

FARADAY

CINE 3

14:30

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16:45

POSTER SESSION AND COFFEE BREAK

AUDITORIUM

17:45

Keynote Lecture

MELiSSA Across Art and Science: Closed Loops, Computation and Cultural Imagination

Angelo VERMEULEN, SEADS (Space Ecologies Art and Design) & Delft University of Technology, Netherlands

EXHIBITION

18:30  
20:00

“Touch the Sky – Explore Space”

Conference participants will have free access to the “Touch the Sky” exhibition, provided they wear their badge clearly visible at all times. Please note that two areas inside the Museum, the Astronomical Planetarium and the Biodomo Pavilion, require separate tickets.

Wednesday, October 8th, 2025

8:00

NETWORKING MEETINGS (AS NEEDED BASIS)

AUDITORIUM

9:00

Keynote Lecture

Power-2-Food using Green Acetate and Microorganisms

Martin PERSSON (Manager of Fermentation Technology, Novonosis, Denmark)

AUDITORIUM

FARADAY

CINE 3

09:45

Track 1: Eating and Breathing in Space

1.2 Plant Characterisation

Chairs: Lucie Poulet (Université Clermont Auvergne), Lucie Thibaud (ZARM)

Track 2: Valorising Wastes, Recovering Water and Drinking in Space

2.2 Wastewater Treatment, Water Recovery and Drinking in Space

Chairs: Korneel Rabaey (University of Gent), Siegfried Vlaeminck (University of Antwerp), Kai Udert (Swiss Federal Institute of Aquatic Science and Technology, EAWAG), Cyprien Verseux (University of Bremen)

Track 3: Paving the Path to Circular Systems for Space and Earth

3.2 Space Demonstrators and Ground Analogues

Chair: Natalie Leys (SCK-CEN)

11h15

COFFEE BREAK

AUDITORIUM

FARADAY

CINE 3

11:45

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		(ZARM)	(University of Antwerp), Kai Udert (Swiss Federal Institute of Aquatic Science and Technology, EAWAG), Cyprien Verseux (University of Bremen)	
13:15	LUNCH			
	AUDITORIUM	FARADAY		CINE 3
14:15	<div>Track 1: Eating and Breathing in Space</div> <div>1.2 Plant Characterisation</div> <div>Chairs: Lucie Poulet (Université Clermont Auvergne), Lucie Thibaud (ZARM)</div>	<div>Track 2: Valorising Wastes, Recovering Water and Drinking in Space</div> <div>2.2 Wastewater Treatment, Water Recovery and Drinking in Space</div> <div>Chairs: Korneel Rabaey (University of Gent), Siegfried Vlaeminck (University of Antwerp), Kai Udert (Swiss Federal Institute of Aquatic Science and Technology, EAWAG), Cyprien Verseux (University of Bremen)</div>		<div>Track 3: Paving the Path to Circular Systems for Space and Earth</div> <div>3.2 Space Demonstrators and Ground Analogues</div> <div>Chair: Natalie Leys (SCK-CEN)</div>
15:15	<div>Track 1: Eating and Breathing in Space</div> <div>1.3 On-Board Food Production and Preparation</div> <div>Chairs: Stefania de Pascale (University of Naples Federico II), Giorgio Boscheri (Thales Alenia Space Italia))</div>	<div>Track 2: Valorising Wastes, Recovering Water and Drinking in Space</div> <div>2.2 Wastewater Treatment, Water Recovery and Drinking in Space</div> <div>Chairs: Korneel Rabaey (University of Gent), Siegfried Vlaeminck (University of Antwerp), Kai Udert (Swiss Federal Institute of Aquatic Science and Technology, EAWAG), Cyprien Verseux (University of Bremen)</div>		<div>Track 3: Paving the Path to Circular Systems for Space and Earth</div> <div>3.3 Terrestrial Applications</div> <div>Chairs: Jeremy Pruvost (University of Nantes), Antoinette Kazbar (University of Wageningen)</div>
17:00	AUDITORIUM			
17:15	Poster Pitch Contest			
	COFFEE BREAK			
	Round Table Event			
17:30	Designing a Sustainable Tomorrow How Visionaries from Different Worlds Shape the Next Human Frontier moderated by <b>Marc OBÉRON</b> (Founder of Cinema for Change International Film Festival, France)			
18:00	Keynote Lecture  Research Progress on Bioregenerative Life Support System (BLSS) by “Lunar Palace-1” Team <b>Hui LIU</b> (Lunar Palace 365 Experiment Captain, Beihang University, China)			
18:30	FREE TIME			
20:00	Gala Dinner – Barceló Granada Congress			
22:00	Getting there 9 minutes 🚀			
Thursday, October 9th, 2025				
	AUDITORIUM			
8:00	YOUNG PROFESSIONAL NETWORK EVENT			
	AUDITORIUM			
9:00	Keynote Lecture  Integration of Biological Life Support Systems into Future Human Space Missions <b>Michael T. FLYNN</b> (Advanced Water Recycling Group Lead, NASA Ames Research Center, USA)			
09:45	<div>Track 1: Eating and Breathing in Space</div> <div>1.3 On-board Food Production and Preparation</div> <div>Chairs: Stefania de Pascale (University of Naples Federico II), Giorgio Boscheri (Thales Alenia Space Italia)</div>	Networking Meetings (as needed basis)		<div>Track 2: Paving the Path to Circular Systems for Space and Earth</div> <div>3.3 Terrestrial Applications</div> <div>Chairs: Jeremy Pruvost (University of Nantes), Antoinette Kazbar (University of Wageningen)</div>
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12:45	AUDITORIUM			
	Keynote Lecture  Circular Approaches in Terrestrial Applications and Management of Complex Microbial Communities <b>Martin HARTMANN</b> (Senior Scientist in Microbial Ecology and Sustainable Agriculture, ETH Zurich, Switzerland)			
13:30	AUDITORIUM			
	Closing Ceremony Organized by the MELISSA Foundation  <b>Robert LINDNER</b> (Head of Life Support and Physical Sciences Instrumentation Section, ESA)			

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