

	ROOM 1	ROOM 2	ROOM 3
8:00	Joel Dore – INRAE	Emmanuel Frossard – ETH	Francesc GÒDIA – UAB
	BioMaterial 1/2	Plants Characterisation 2/3	System Studies 1/3
	Chair: Advenit Makaya (ESA) Co-chair: Jochen Harms (BHL) <i>20 minutes</i>	Chair: Emmanuel Frossard (ETHZ) Co-chair: Ann-Iren Jost (CIRIS) <i>20 minutes</i>	Chair: Philippe Fiani (SHERPA) Co-chair: Lorenzo Buschieri (Enginsoft) <i>20 minutes</i>
8:30	Passive limitation of surface contamination by perFluoroDecylTrichloroSilane coatings in the ISS during the MELISSA experiments. Laurence LEMELLE – ENS Lyon	Evaluating Microgreens Crop Readiness for Space Production. Lucie POULET – UCA	Assessing the resilience of circular water systems: a simulation-based approach using the UWOT model. Dimitrios BOUBOUZIOTAS – KWR
8:50	Assessing the integration of a bioreactor producing SCPs and PHAs from organic waste into global environmental systems. Etienne PERRIN – CNES	Crop production in space: the microbial helping hand. Danny GEELEN – U GHENT	Circularity indicators and digitalisation for monitoring circular space and terrestrial systems. Francois CLUZEL – CENTRALSUPELEC
9:10	From Organic Waste to Ink for 3D Printing Within the MELISSA Loop. Martin CERFF –	SUPER FOOD FOR SPACE: from a complex biological system to a simplified plant model. Leone ROMANO – UNINA	Space Greenhouse Design: towards a systematic methodology. Lucie POULET – UCA
9:30	THE FUTURE OF FOOD PRODUCTION. Giorgia PONTETTI – EltHub	Lactuca sativa L. plants showed different capacities to cope with ionizing radiation when exposed to increasing doses of heavy ions. Sara De FRANCESCO – UNINA	Designing the MELISSA Pilot Plant Integration. Gas loop closure between higher plant chamber and crew compartment: requirements specifications, simulations and hardware. Carles CIURANS – UAB

9:50 COFFEE BREAK

	ROOM 1	ROOM 2	ROOM 3
	Plants Characterisation 3/3	Space & Terrestrial Demonstrators 2/3	System Studies 2/3
	Chair: Bahar Aciksoz (U Essex) Co-chair: Veronica De Micco (UNINA) <i>20 minutes</i>	Chair: Chloe Audas (ESA) Co-chair: Alexis Paillet (CNES) <i>20 minutes</i>	Chair: Gilles Dussap (UCA) Co-chair: Angelo Vermeulen (TUD) <i>20 minutes</i>
10:10	Integration of Human Urine Derivatives in Soilless Systems Fertilization to Grow Salad Crops. Christophe EL NAKHEL – UNINA	SEEDLING GROWTH: results from the largest ESA/NASA Arabidopsis experiment on the ISS looking into the molecular adaptation of plants to the Moon gravity and other life support system relevant scenarios. Raul HERRANZ – CSIC	A roadmap for future system studies VARSITY legacy. Lorenzo BUCCHIERI – ENGINSOFT
10:30	Characterization of the performance of the Higher Plants Chamber in the MELISSA Pilot Plant under batch and staggered mode of operation using L. sativa. Carolina ARNAU – UAB	PFPU: Microgravity Precursor Food Production Unit development statu. Giorgio BOSCHER – THALES	Specification process of a simulation platform for the MELISSA project. Alexandre SOBIAS – CENTRALSUPELEC
10:50	Effect of the addition of human urine-based struvite on the growth of green bean on Mars and moon soil simulants. Vieger WAMELINK – U Wageningen.	Concept Study of a BLSS Module for LEO, Cislunar and Mars Transit stations. Paolo CARATELLI – U Abu Dhabi	Modelling physical processes in higher plants using leaf replicas for space applications. Joanna KUZMA – UCA
11:10	Amphibious plants present a gigantic shift in root microbial community across life cycles. Jorge MANDUSSI – U California	Adaptive vertical farm for fresh food production in life support systems. Patrizia BAGNERINI –	Design of the MELISSA loop control strategy. Benjamin THIRON – SHERPA
11:30	Light stimuli to guide roots of agriculturally-important plants in extra-terrestrial environments. Luigi IZZO – UNINA	Lessons learned for life support system payloads. Blandine GORCE – ESA	SpaceShip.FR and MELISSA: Harmonized Roadmaps for Regenerative Life Support Systems. Gregory NAVARRO – CNES
11:50		Water Across the Plant Systems (WAPS): ground tests on hydration and air humidity to model plant growth for space experiments. Giovanna ARONNE – UNINA	

12:10 LUNCH

	ROOM 1	ROOM 2	ROOM 3
13:10	Audrey Berthier – MEDES	Ray Wheeler – NASA	Eric Landel – RTX
	Waste Treatment 1/2	Space & Terrestrial Demonstrators 2/3	System Studies 3/3
	Chair: Sandra Ortega (ESA) Co-chair: Ramon Ganigue (U Ghent) <i>20 minutes</i>	Chair: Cesare Lobascio (THALES) Co-chair: Carol Arnau (UAB) <i>20 minutes</i>	Chair: Eric Landel (RTX) Co-chair: Chloe Audas (ESA) <i>20 minutes</i>
13:40	Soluble wipes in deep space waste management. Brian Mc CORMACK – McCORMARK Innovation	Running a photobioreactor in space for the production of oxygen and edible spirulina biomass. Felice MASTROLEO – SCK	Knowledge models of photobioreactors and their paths integral formulation. Jeremy DAUCHET – UCA
14:00	Bioenergetic modelling for predicting and steering VFA production in carbohydrates anaerobic fermentation. Alberte REGUEIRA – U Ghent	Design & operation of a bread board model of spirulina photobioreactor equipped with a harvesting system to support ISS On Board Demonstrator development. Dominique CHAPUIS – BEYOND GRAVITY	Conceptual design of an Environment Control and Life Support System for a Mars Transit Mission. Blandine GORCE – ESA
14:20	BioPack: a technology for waste inhibition and compaction for Life Support Systems. Fabio LORENZINI – KAYSER It	Spreading and sliding of condensed air humidity droplets over metallic substrates under non-isothermal conditions. Ouriana OIKOMIDOU – U Thessalonikis	Model structuration and review for MELISSA knowledge and control. Laurent POUGHON – UCA
14:40	Characterization of a promising thermophilic chain elongating bacterium isolated from a MELISSA waste compartment reactor, Thermocaproicibacter melissae gen. nov., sp. nov. for n-caproate production utilizing polymeric carbohydrates. Tinh NGUYEN – KUL	The Effect of ISS-like Ionizing Radiation and Microgravity on the Transcriptome of N-cycle Bacteria. Tom VERBEELEN – SCK	Analog mission to test life support systems for future manned missions. Royer QUENTIN – ISAE

15:00 COFFEE BREAK

	ROOM 1	ROOM 2	ROOM 3
	Waste Treatment 2/2	Space & Terrestrial Demonstrators 3/3	Societal Impact 1/2
	Chair: Ana Soares (U Cranfield) Co-chair: Korneel Rabaey (U Ghent) <i>20 minutes</i>	Chair: Paolo Dainesy (Beyond Gravity) Co-chair: Dries Demey (Qinetiq) <i>20 minutes</i>	Chair: Isabelle Damoiseaux (IDDUP) Co-chair: Hennis Thieme (AstroPlant) <i>20 minutes</i>
15:20	Lift off biogas industry : BIO-VALO, the pilot test platform for your projects. Pierre FONTANILLE – BioVALO	Advancement of the PFPU Root Module for the production of tuberous species in microgravity. Mario PALLADINO – UNINA	Open-source cellular agriculture and other one health citizen lead projects. Garcia TORRENTS – MARC
15:40	Plastic recycling in space using microorganisms: a potential tool to close the loop. Rosa SANTOMARTINO – U EDINBURGH	The SOLE project: a hydroponic greenhouse demonstrator for fresh food production in space. Georgia PONETTI – G&A Engineering	AstroPlant – an educational citizen science architecture for plant characterisation. Thieme HENNIS – ASTROPLANT
16:00	Evaluating the use of menstrual blood-derived cell therapy to support astronauts in long-term space missions. Marion DUGUE – TU DELFT	Autonomous complex biospheres in space : moral grounds, historical perspectives and a way forwards. Louise FLEISCHER – SPRING	Mars Camp – How to raise awareness of STEM through the topic of space. Laure DELBECQ – EuroSpaceCenter
16:20	The membrane bioreactor (MBR): A hybrid technology for bioregenerative wastewater treatment and resource recovery in space. Daniel YEH – U South FLORIDA	Analog astronaut habitats and space simulation systems. Kato CLAEYS – KUL	The MELISSA Project in the ESA_Lab@ Initiative: A Brainstorming Platform Promoting European STEM talents. Maria Gabriella SARAH – ESA

16:40 Free time

19:30 Gala dinner