

9:00

## REGISTRATIONS

9:30

Torben Henriksen – ESA/D TEC

9:40

Giorgio Magistratti – ESA HRE

9:50

Sébastien Barde – CNES

10:00

Stella TKATCHOVA – EU Innovation

10:10

Geraldine NAJA – ESA/D CIP

10:30

Didier Schmitt – ESA-HRE  
Chair : Christophe Lasseur – ESA

11:00

Francois Forget – IPSL

11:30

Christophe Lasseur – ESA-TEC

12:10

Elena Grashchenkova – ESA CIP

12:30

## LUNCH

## ROOM 1

## Plants Characterisation 1/3

Chair: Lucie Poulet (UCA)  
Co-chair: Ray Wheeler (NASA)  
20 minutes

## ROOM 2

## Food Process 1/2

Chair: Christel Paille (ESA)  
Co-chair: Joel Dore (INRAE)  
20 minutes

## ROOM 3

## Urine &amp; Nitrification 1/3

Chair: Siegfried Vlaeminck (U Anvers)  
Co-chair: Nele Kirkerup (EAWAG)  
20 minutes

13:30

Shortening the Breeding Cycle. Bahar  
ACIKSOZ – U SUSSEXA novel multiproduct pathway towards algal  
food ingredients.  
Antoinette KAZBAR – U WAGENINGENInfluence of organics removal and nitrification  
on pharmaceutical and artificial sweetener  
removal ; the example of urine treatmet.  
Aurea HEUSSER – EAWAG

13:50

PaCMan Unit upgrade. New subsystems for a  
deeper investigation of the root zone.  
Claudia QUADRI – ENGINSOFTLettuce cultivation in a urine recycling  
scenario: Effects of different NH4:NO3 ratios.  
Mona SCHIEFLOE – NTNUCommunity shift of ammonia-oxidizing  
bacteria and washout of nitrite-oxidizing  
bacteria due to pH changes during urine  
nitrification.  
Tom VERBEELEN – EAWAG.

14:10

Fertilizer production for soilless plant  
cultivation in closed life support system –  
lessons learned from 4 years study.  
Anna JURGA – U WROCLAWVitamin B12, microalgae and the MELISSA loop.  
Ellen HARRISON – U Cambridge.Electrochemical stabilization and resource  
recovery from source-separated urine.  
Popat SUDEEP – U CLEMSON.

14:30

Characterization of three leafy vegetables in a  
sealed plant-growth chamber for closed life  
support systems.  
Antonio PANNICO – UNINASpecies selection of microgreens to be  
produced in space as functional food for  
astronaut consumption.  
Luigi IZZO – UNINAImpact of the Composition of Organics on  
Urine Treatment.  
Nele KIRKERUP – EAWAG

14:50

Plants for Space – a new multidisciplinary  
centre focused on enabling long term-deep  
space habitation.  
Mathew GILLIHAM – U ADELAIDEGreen algae for sustainable edible proteins  
production.  
Matteo BALLEOTARRI – U VERONA.Will be three a multitude in the nitrifying  
compartment? First steps towards the  
characterization of a novel synthetic  
community by using flow cytometry and  
atomic force microscopy.  
Celia ALVAREZ – U Ghent

15:10

Novel approach to enhance the potential of  
ground preparatory activities for improved  
plant growing experiments in microgravity.  
Ilana LLEVA – BASMEAT4SPACE – Cultured meat for human  
space exploration.  
Pedro GARCIA – ESAThe effects of ISS-like ionizing radiation on the  
proteome and metabolome of ureolytic and  
nitrifying bacteria.  
Thanh huy NGUYEN – U MONS

15:30

## COFFEE BREAK

## ROOM 1

## Air &amp; Grey Water

Chair: Ruddy Wattiez (U Mons)  
Co-chair:  
20 minutes

## ROOM 2

## Food Process 2/2

Chair: Alain Mailliet (CNES)  
Co-chair: Felice MASTROLEO (SCK)  
20 minutes

## ROOM 3

## Urine &amp; Nitrification 2/3

Chair: Kai Udert (EAWAG)  
Co-chair: Marijn Timmer (U Anvers)  
20 minutes

15:50

Grey water recycling from space to earth.  
Pierre MAGNES – FIRMUSHow abiotic factors change the requirements  
for plants cultivation in Space systems.  
Chiara AMITRANO – UNINAToward nitrogen recovery from unnitrified urine  
using Limnospira indica.  
Baptiste LEROY – U MONS.

16:10

Indoor CO2 Direct Air Capture (iCO2-DAC): CO2  
As Renewable Carbon Source.  
LuiRafael LOPEZ de LEON – U GIRONAThe significance of aquaponics in Controlled  
Ecological Life Support Systems.  
Yoshiaki KITAYA – U OSAKAUrine and life support: Some nitrification-  
based MELISSA solutions.  
Siegfried VLAEMINCK – U ANVERS

16:30

Anerobic Membrane Bioreactors for Long-  
Duration Sanitation: Current Technologies and  
Pharmaceutical Challenges.  
John MARSHALL – U TEXASGround-based demonstrator for the first  
space-ready lunar agricultural module.  
Daniel SCHUBERT – DLRThe alkalinity dilemma in nitrification.  
Agata SIEDLECKA – U WROCLAW

16:50

Electroactive biofilm development under  
controlled hydrodynamic in a Couette-Taylor  
electrochemical reactor.  
Florent BOUCHON – INRAEInnovative Spirulina Nutraceuticals products  
for health prevention in long flight and  
extraterrestrial habitat.  
Olivier LEPINE – ALGOSOURCEClosing loop with biological nitrification for  
nutrients recovery and surfactants removal.  
Kamil JANIACK – U Wroclaw.

17:10

17:30

Christer Fuglesang – ESA Astronaut

18:20

## Travel to "Cité de l'espace"

19:00

## Visit "Cité de l'espace"

20:30