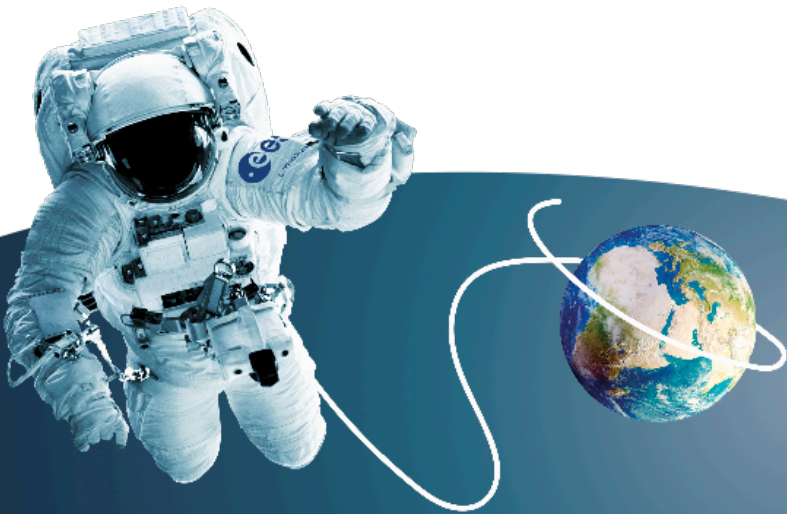




CREATING  
A CIRCULAR  
**FUTURE**

# MELISSA activities in Switzerland

Oliver Botta  
Swiss Space Office





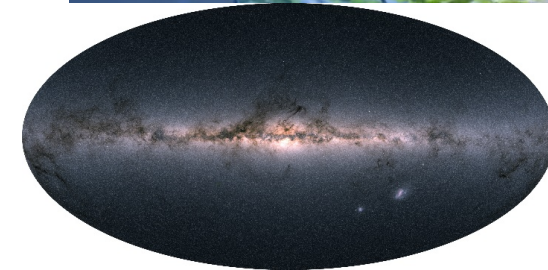
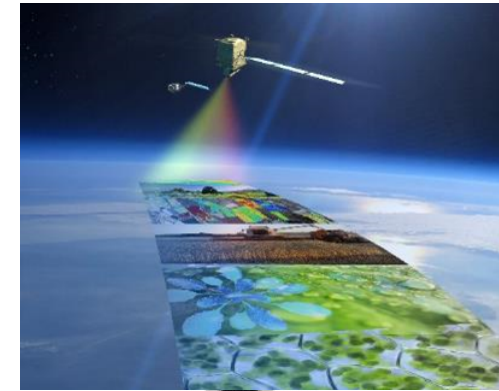
# Swiss Space Policy

## 3 Main Pillars

- Development and utilization of Space infrastructures to improve the quality of life of our citizens
- Sustainable engagement in exploration for the benefit of innovation and the knowledge society
- Switzerland – a competitive and reliable partner

**Switzerland safeguards its national interests *via selective European and international cooperation:***

***ESA, EUMETSAT, H2020, COPUOS ...***





# Swiss Space Implementation Plan (SSIP) 2017

## Objective:

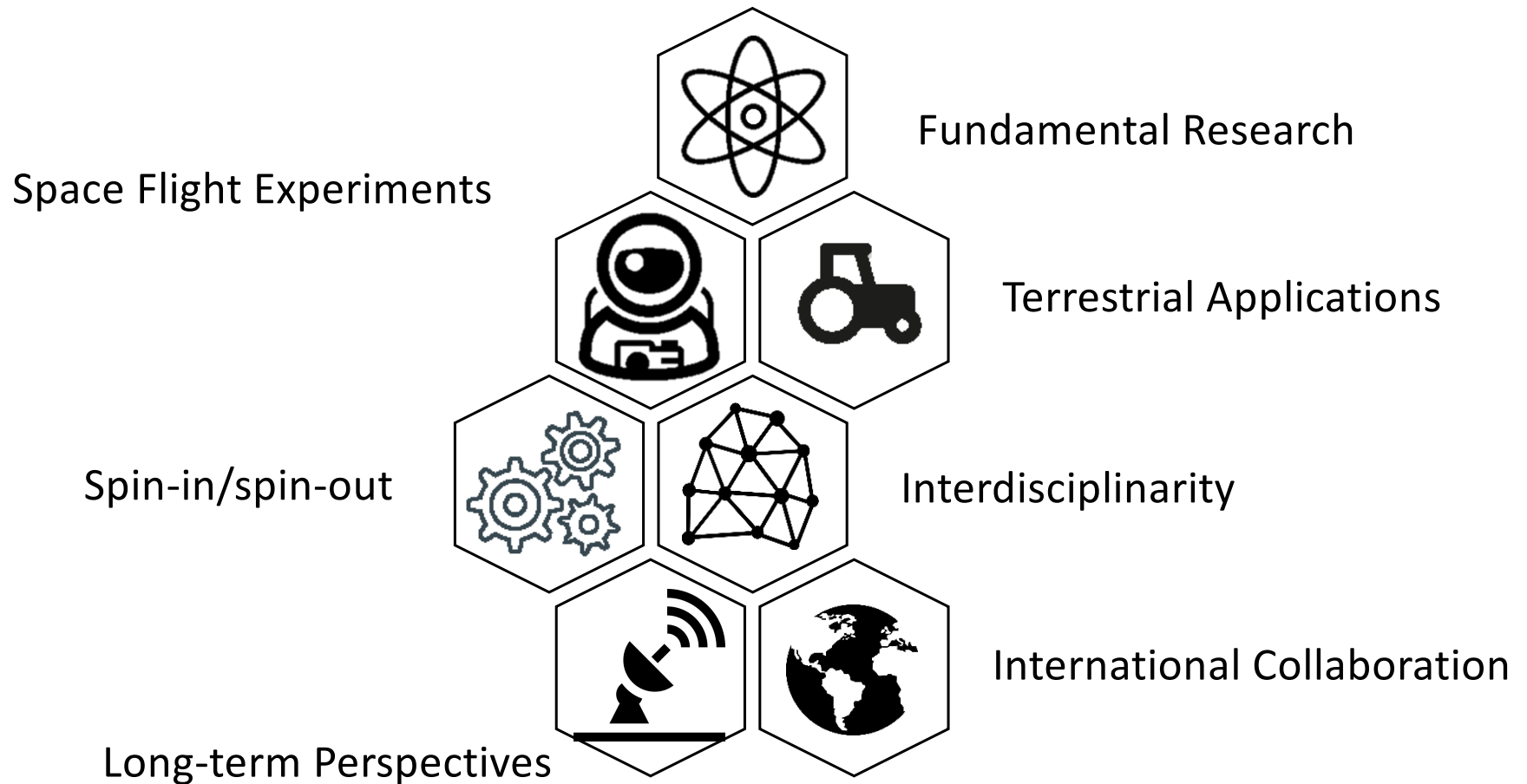
To strengthen an innovative and competitive Swiss space sector through an enhanced selective participation in European and international space activities.

## Measures:

- Increasing the *excellence and competitiveness* of the Swiss scientific community and industry
- Contribute to the *digital transformation* of Switzerland
- Strengthen the Swiss space ecosystem, specifically to enable *stronger networking and clustering*, and to *promote education and training* initiatives.



# Why MELiSSA/ALSS?





## Preparation for Space19+



- Interest at Swiss Space Office to consolidate the Swiss MELiSSA/ALSS community.
- SSO organized, in collaboration with ESA, a Workshop in June 2018 to bring the diverse Swiss community, together to exchange ideas, raise awareness on on-going research topics and discuss potential priorities.
- First step to foster further collaborations within Switzerland and promote international collaboration through ESA.
- Occasion to inform the community about the new programmatic framework at ESA (E3P) and the decisions to be taken at Space19+
- Following the workshop a Position Paper by the community was elaborated, under lead of University of Lausanne and ESTEE.
- Will be presented later during this conference by T. Besson





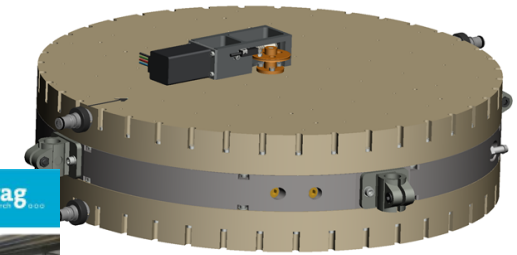
# Projects (non-exhaustive)

- Basic Research & Development
  - ✓ BELISSIMA
  - ✓ MELISSA Food Characterization
  - ✓ POMP
- Flight Experiments
  - ✓ BIORAT 1 & 2
- Ground Demonstrators
  - ✓ Oikosmos
  - ✓ Scorpius prototype
- Terrestrial applications
  - ✓ Water treatment and recycling
- Education and communication
  - ✓ IGLUNA



Target areas

eawag



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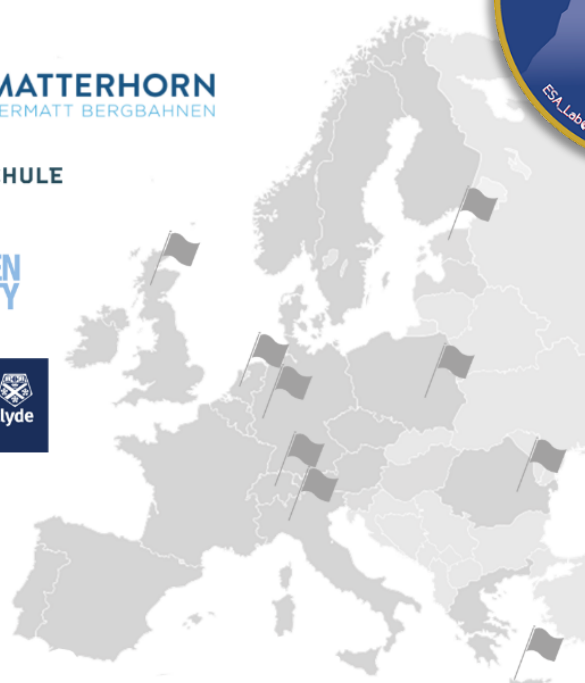






# ESA\_Lab / IGLUNA

- 9 Countries
- 18 Teams
- 13 Universities
- 1 Habitat in Ice



virtual



16 – 25 July 2021



MELISSA



MICRO-ECOLOGICAL  
LIFE SUPPORT SYSTEM  
ALTERNATIVE

**THANK YOU.**

Oliver Botta

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