A newcomer in UNISEC: Switzerland

2019/12/02
Swiss Space Center Network
SwissCube
Switzerland’s first satellite

- Launched in 2009
- 200 students involved in multiple Swiss universities
- 10 years and still working!
- Avoided several impacts with debris
CleanSpace One

- Bring SwissCube home
- Make new space sustainable
- Creation of a spin-off: Clearspace
Astrocast

For a secure connection to any IoT device on Earth

- Global coverage
- 8 planes of 8 satellites in LEO
- Many applications:
  - maritime
  - environmental
  - mines, oil and gaz
Spaceport America Cup
Asclepios
A do-it-yourself space mission

- Simulation of a 7-day lunar mission
- 60 students across the world
- Partnership with EPFL, UNIL and ESA
Objective: Build self sufficient habitat for extreme environment, e.g. Moon

- EPFL Lausanne: autonomous vegetables production
- ZHAW Zürich: Smart waste-based agricultural growing system
- CERN Geneva: radiation monitoring
- Bern University: amino acid detection by laser desorption mass spectrometer
Objective: A CubeSat platform for In-Orbit-Demonstration of scientific instrument

- Payloads are chosen from research institutes
- First payload: Swiss instrument
- Second payload: open to international proposition
UNISEC and Switzerland

Glad and honored to be joining UNISEC

Look forward to actively participate into UNISEC-Global

And possibly host a UNISEC event..?
Thank you!

Alfonso Villegas