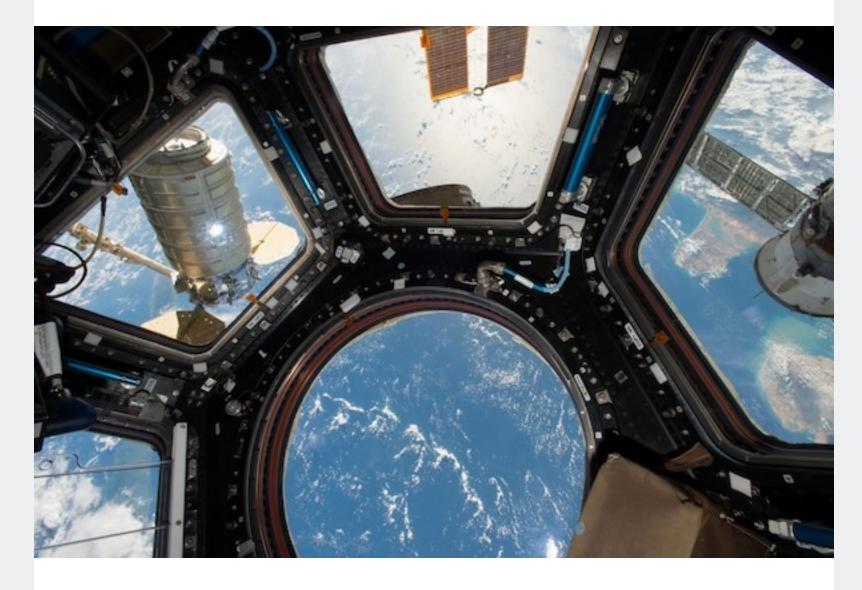
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UZH Space Hub

## UZH Space Hub Newsletter



Dear UZH Space Hub Community

Autumn has arrived, the new semester has started and we have many space news to share with you. In this newsletter, you will learn more about the relation between ISS and Luzern University of Applied Sciences and Arts, and about the new space-related startups in the Swiss landscape. Among the opportunities, you will find many open ESA calls for innovative solutions, where the use of Earth Observations could be fundamental. Finally, do not forget to read our monthly section *Meet a Space Scientist*, this time you will have the possibility to learn more about gravitational waves!

Have a nice read,

UZH Space Hub Team



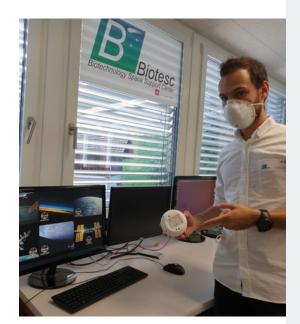
#### **ARIS booth @ Irchel**

We are happy to have hosted ARIS team on the Irchel campus to engage students from the UZH! Do you dream about space but you do not have a scientific background? That's not a problem at all, their team is looking for students in different sectors (for example natural sciences, law, business and communication) for the next rocket competition. If you are interested, check all their open positions and do not hesitate to get in contact with ARIS!

**Read more** 

# Hello ISS, Switzerland calling!

On September 16, the Swiss Biotechnology Space Support Center (BIOTESC) presented their exciting work at the yearly Open Day. As an expert group, BIOTESC supports the preparation and operation of European biological experiments of ESA which are conducted on the International Space Station (ISS). It was fascinating to see a "random positioning machine" in their lab, a device which exposes samples to modeled microgravity on Earth.



Read more

#### **ESA BIC Demo Day**

On September 10, we had the pleasure to attend in person the ESA BIC Demo Day. A great occasion to get to know the new startups that entered the program. The Swiss Space landscape is growing, with startups which use Earth Observation to prevent natural disaster, which are developing flying robots to work at height, which offer photonic and quantum sensing solutions, and many more. Good luck to all of them!



#### Modelling planetary interiors

Congratulations to our member Prof. Ravit Helled and her team for their publication *Understanding dense hydrogen at planetary conditions* on Nature Physics Reviews! Do you want to learn more about how astrophysicists can study planets' structure, although elements experience extreme conditions that we cannot reproduce on Earth? Can advanced numerical simulations, modelling planetary interiors, help to describe the high-pressure physics of hydrogen and helium? We will publish soon an interview, stay tuned on our webpage and social media. Image credit: Jos Schmidt.





#### **Conversations with Academia**

Students from UZH are invited to join on October 8, 2020 (12:30-13:30) the "Conversations with Academia" that is organised from UZH together with the University of Geneva and the United Nation Office in Geneva. We will introduce you into the topic of Big Data for Big Challenges, the Swiss Data Cube for Environmental Monitoring, and will discuss with you on the use of satellite remote sensing data to tackle environmental challenges.



Please register via conversations@unige.ch as access to the zoom link is restricted in order to allow an exciting discussion after the presentation.

Read more

#### **Ringvorlesung - The Human in Science and Faith**

With the UZH Space Hub, we expand our horizons: The Human in Science and Faith – an UZH lecture series of the UZH Interdisciplinary Commission (UZH-i), coorganized by UZH Space Hub members Matthias Wüthrich (Faculty of Theology) and Oliver Ullrich (Faculty of Medicine).

Read more



#### IAC 2020 Online

Have you ever dreamed of attending the International Astronautical Congress (IAC), but it was always too far away and expensive? For the first time, this year the 71<sup>st</sup> IAC will be presented fully online and free of charge, from October 12 to 14, 2020. The theme of this CyberSpace Edition will be about the International Astronautical Federation (IAF) Motto: "IAF Connecting @II Space People".

Read more

## Opportunities

#### Space based servicesapplications addressing COVID-19 outbreak

The COVID-19 pandemic has created enormous



challenges to the society and ESA would like to contribute to solutions. If you have an idea to facilitate the quick integration and deployment of concrete and sustainable solutions, which make use of space-based products and services, then apply to this ESA call. Deadline for applications is November 15, 2020.

Read more

#### **Responsible AgriTech**

Do you have an idea to use space enabled applications for sustainable agriculture? To stimulate the development of space applications, on October 12, ESA will open the Kick-Start call in coordination with the ICT-AGRI-FOOD project. Space enabled applications can help addressing needs such as locating assets in the fields, monitoring crops status and providing reliable connectivity to farmers also in remote areas. Deadline for applications is November 27, 2020.



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Image credits: HQuality

#### **ESA PropTech**

Do you have a company which develops services exploiting satellite data and technologies to add value to relevant stakeholders operating in Shared Economy, Investment Management & Marketing, Insurance & Urban Planning or Construction Technology & Smart Buildings? ESA's PropTech Kick-Start initiative offers support and funding for ideas in these domains. Deadline for applications is February 26, 2021.

Read more

### Meet a Space Scientist

This month we have interviewed Philippe Jetzer, professor at the Physics Institute of the University of Zurich. His research focuses on a very hot topic nowadays, the detection of gravitational waves! Would you like to know more? Then read the full interview.



Read more

