

The Space Unconference
No Spectators, Only Participants

SPACE UP FEDERATION

#TSS_OFF

PROGRAM

June 23, 2018

Le Catalyseur
Universite Toulouse III Paul Sabatier

The SpaceUp FEDERATION organizing team would like to especially thank **Le Catalyseur** for hosting the event!



WELCOME TO SPACEUP FEDERATION 2018!

SpaceUp France and Open Space Makers are happy to welcome you to a SpaceUp Unconference held in Toulouse France focused on the Federation initiative.

The Federation initiative was officially launched by CNES in June 2017 during the International Paris Air Show. It aims at opening space infrastructure to citizens and developing a Space disruption ecosystem able to produce open knowledge and open source space hardware in a collaborative and responsible way.

Federation is addressed to fablabs, makerspaces, hackerspaces and other open places where collaborative manufacturing tools are available, as well as to the citizens wishing to invest their energy in designing and building the future world, to meet societal challenges such as the protection of our planet, to allow mankind to live one day in space or simply to achieve their dreams.

This unconference contribute to the Toulouse Space Show Off events with the purpose of celebrating the first year of the Federation initiative.

You will have to help us make it a success in the upcoming day!

We have provided you with a location, an empty grid and a few special-guests, but now it's up to you to fill the grid with great space content. Just stick a post-it note in the slot that best suits your idea and tell us all about it! Most important of all, have fun!

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How it Works

SpaceUp is an unconference, also known as an user-generated conference or a BarCamp. There are no spectators at SpaceUp, only participants.

All attendees are expected to give a demo, present a talk, or participate in a panel or roundtable. It's not as scary as it might sound, though. Sessions at SpaceUp are conversations, just like every conversation you've had (or wanted to have) at any other conference. The only difference is that the sessions can be planned on the spot, which means we're sure to be talking about topics we find interesting.

Registration and badges

On-site registration works a lot like any other conference; you'll receive a badge (keep it on you at all times!), a schedule, and maybe some goodies at the front desk. Other attendees are here to meet you, and you're here to meet them. Primarily you should write your name on it, but you should feel free to customize your badge to better reflect who you are.

Introductions

The day of the SpaceUp will start with the presentation of all who have registered on the grid for a session that same day. You have one sentence to describe what your session will be about. Choose it wisely: it will help determine how many attendees you will get in your session!

The Session Grid

SpaceUp has many sessions going on at the same time. The only way to keep up with them all is the session grid, a giant board with all the available sessions listed on it.

The session grid starts out empty at the beginning of SpaceUp; only breaks and a few special sessions are scheduled beforehand. Sessions are proposed by writing a synopsis on a post-it and sticking it in one of the slots on the grid. The grid fills up quickly over the course of the morning, but it grows and changes as the day goes on and more ideas surface. It is fine to change your mind and replace or edit your suggestion throughout the event.

A session can take a few different formats: a presentation with Q&A, a demo, a panel of experts, or a roundtable. Some of the most interesting sessions are proposed as open-ended questions. ("How people can develop open space hardware?" "What's the cheapest way to do science in space?"). Project demonstrations make great sessions, too, especially when they're hands-on.

There should be at least one session about SpaceUp itself, to talk about what we can do better, both on the spot and for the next SpaceUp. You're more than welcome to start other sessions about SpaceUp, especially if you think there's something wrong.

T-5 Talks and other presentation formats

If you're itching to give a presentation with slides, we have just the format for you: it's called Ignite. Each speaker gets 5 minutes to talk, with 20 slides that rotate automatically every 15 seconds.

At SpaceUp, we call our Ignite-format talks T minus 5.

If you need even more time you can use a 'normal' free-format 20 minutes slot. Please bear in mind that all slots end 5 minutes prior to the following slot, to allow people to move from one room to another. Presentations start at their designated hour. Room moderators will take care that all talks start and end sharply on time.

Schedule

TIME	PROGRAM
9:00 - 9:30	Registration and morning coffee
9:30 - 9:45	Unconference Organization (SpaceUP France)
9:45 - 10:00	Federation inception (Michel Faup - CNES)
10:00 - 10:30	Towards 60 million French Contributors (Damien Hartmann - Open Space Makers)
10:45 - 12:00	Grid sessions - SEE GRID
12:00- 12:30	A world of the commons (Benjamin Jean - Inno3)
12:30 -13:30	Lunch + fill the grid
13:30 -14:00	T – 5
14:00 -14:30	Designing Our Sci-Fi Space Future (Ariel Ekblaw - MIT Media Lab)
14:30 - 15:00	Dreaming Space (Julien Cantegreil - ASTERIDEA)
15:00 - 16:00	Grid sessions - SEE GRID
16:00 - 16:30	Free and accessible Space for all (Pierros Papadeas - Libre Space Foundation)
16:30 - 17:00	Coffee break
17:00 - 17:30	One of us will fly into space with a homebuilt and crowdfunded rocket (Mads Stenfatt - Copenhagen Suborbitals)
17:30 - 18:30	FEDERATION round table

Guest speakers

Michel Faup – Centre National d'Etudes Spatiales



Michel Faup graduated from Ecole Supérieure d'Optique in 1983. He joined CNES in 1984 on the development of sensors for robotics, rendez-vous and docking, non-destructive control and microgravity experiments. In 1989, he was appointed System manager in an integrated team between ESA and CNES in charge of the development of the Silex project (Inter-satellites optical experiment between Spot4 and Artemis)

From 1997 to 2004, he was head of various teams in charge of constellation engineering, application engineering and radiocommunication engineering. He was then head of the service in charge of CNES radiocommunication projects during ten years. In January 2016, he joined the CNES Directorate for Innovation, Applications and Science as Manager of Innovation and Prospective.

Damien Hartmann – Open Space Makers



Damien Hartmann is cofounder and president of nonprofit association Open Space Makers. Damien realized that he could actually take action to help develop the human footprint in space when he attended the first SpaceUp in Europe, back in 2012. He then co-organized the first two SpaceUp unconferences in France, and then got involved in his local hackerspace where he began building an open source hybrid rocket.

He later switched to designing and building the Alpha Rocket experimental rocket, which was successfully launched in July 2017, the first rocket built and launched by a team from the Electrolab hackerspace. With a bit of luck and a lot of enthusiasm, he became the first president of the Open Space Makers in October 2017.

Passionate about space, continuous improvement and empowering fellow humans to reach for the stars, during the day he is a sales rep in the IT industry.

Benjamin Jean – Inno3



Known for all his work on Open Source and Open Data, Benjamin Jean is currently CEO of inno³, an open innovation consulting firm focused on IP's value and collaborative and open project management. He is also the cofounder and president of « Open Law*, Le droit ouvert », a French non-profit organization promoting activities to enhance the legal sector's transformation through digital co-creation programs based on Open data, Open Source and Open Innovation principles.

Strongly mobilized on opportunities presented by these open models in the digital transformation of careers and major industrial sectors, Benjamin Jean regularly intervenes as an expert at several events and conferences on these subjects. Indeed, besides his full-time job at inno³, he teaches Intellectual Property law at several universities, he is Master conferences at Science Po, and works as a consultant at Gilles Vercken Law firm. Actively involved in the open digital ecosystem, he works and participates with many committed

actors on this subject. He is a member of Systematic Paris Region Executive board, and administrator of PLOSS Paris Region, as well as present in several free software communities, administrator of Framasoft, and co-founder of Veni Vidi Libri, and the annual conference cycle « European Open source & Free Software Law Event » (EOLE).

Ariel Ekblaw - MIT Media Lab's Space Exploration Initiative



Ariel Ekblaw is the founder and lead of the MIT Media Lab's Space Exploration Initiative, a team of over 50 students, faculty, and staff actively prototyping of our Sci-Fi space future. For the Initiative, Ariel coordinates space research and launch opportunities across the spectrum of science, engineering, art, and design, and builds collaborations on this work with MIT and Space Industry partners.

Ariel is simultaneously a graduate research assistant at the MIT Media Lab, where she is completing a PhD in Aerospace Structures in Dr. Joseph Paradiso's Responsive Environments group. Her current research includes designing, testing and deploying self-assembling space architecture, as future habitats for space tourists and science missions in orbit around the Earth and Mars.

Ariel brings an interdisciplinary approach to her research at the Media Lab, with degrees in Physics, Mathematics and Philosophy from Yale University and a master's in blockchain research from MIT. Her past work experience includes blockchain product development, cloud computing analytics at Microsoft Azure, big data programming at the CERN Particle Physics Laboratory, microgravity research with NASA, and Mars2020 rover hardware systems engineering at NASA's Jet Propulsion Laboratory.

Ariel's work has been featured in AIAA, IEEE, Wired, Ars Technica, MIT Technology Review, Harvard Business Review, PRI's ScienceFriday, and more.

Julien Cantegreil – ASTERIDEA

Julien Cantegreil is chairman of ASTERIDEA and CEO of OurSpace Labs. Before that, he was Deputy Group General Counsel of KERING; has been teaching or researching in Law in various institutions (ENS, Sorbonne, Max Planck Institute, Collège de France); was director of programs for the French policy think tank EN TEMPS REEL; and served as speechwriter for the French Minister of Economy and Finance. He has completed two decades of pro bono work. ENS, agrégation, PhD and LLM (Yale).

ASTERIDEA is a collective, newly created French not for profit foundation, supporting scientific, educational and artistic activities related to the promotion of the activities outside terrestrial atmosphere and, more generally, of space exploration. It promotes sciences and international collaboration. It aims at fostering a sustainable development and artistic representation of the space sector by a variety of activities in France and abroad.

Pierros Papadeas – Libre Space Foundation



**Libre Space
Foundation**

Pierros Papadeas is board member and Director of Operations at Libre Space Foundation. Pierros studied Architecture but quickly moved to Open Source Community Management roles and work in Mozilla Foundation. An avid satellite and space enthusiast, co-founded hackerspace.gr (the first and largest hackerspace in Greece) In 2014 he co-founded the Libre Space Foundation following the establishment of SatNOGS, the global network of open source satellite ground stations. During 2016 he oversaw the design, production and delivery as Project Manager for UPSat the first open source cubesat launched in space.

Libre Space Foundation (LSF) is a non-profit foundation, with many contributors and members around the world, aiming to promote, advance and develop libre (free and open source) technologies and knowledge for space. To do that LSF design, develop and deliver space related projects ranging from Ground Station equipment to global monitoring Networks and satellite missions.

Mads Stenfatt - Copenhagen Suborbitals



**COPENHAGEN
SUBORBITALS**

Mads Stenfatt has been a member of Copenhagen Suborbitals since 2011, and he is leading the development of the parachute systems. This includes the design, development, testing and implementation of the parachute system that is going to be used on the space capsule in the manned amateur space flight that they are working towards. Mads is also one of the 3 astronaut candidates in the group.

In his regular day job, Mads is Chief Pricing Consultant in one of the largest Nordic Integrator Banks.

Copenhagen Suborbitals is the world's only manned, amateur space program, located in Denmark with followers from all over the world. Since 2011, Copenhagen Suborbitals have built and flown 5 homebuilt rockets and space capsules from a ship in the Baltic Sea. It's all crowdfunded and non-profit, and has only come this far because people all over the world donate money that pay the materials, tools and rent. Their goal is simple: To fly an amateur astronaut into space above the Karman line (100 km's above earth's surface) and safely back.

Practical Information

Wifi and Internet access

An individual wifi access code will be provided to you at your arrival during on-site registration.

Access to the Catalyseur

Location: Campus de Rangueil | Rdc - Bâtiment U4 | 118, Route de Narbonne - Toulouse

GPS coordinates: 43°33'46.7"N 1°28'08.0"E



→ FROM THE AIRPORT OF TOULOUSE-BLAGNAC

You can take the shuttle or the tram T2 to go to the city center.

→ BY SUBWAY

Subway : Ligne B - arrêt Université Paul Sabatier

The Catalyseur is located 5mns walking distance from here.



→ FROM THE CITY CENTRE BY BUS

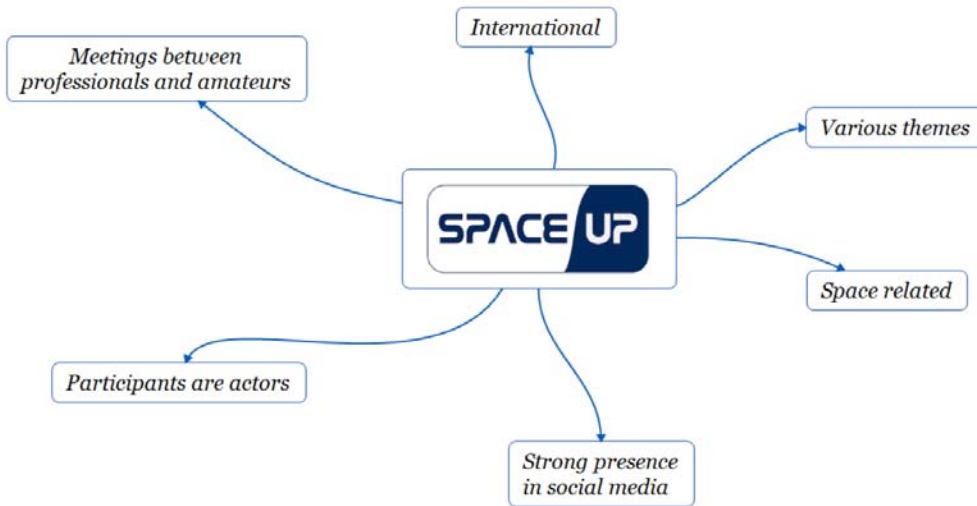
Bus: 2, 34, 56, 78, 81, 82

SpaceUp FEDERATION organizing team

SpaceUp France

SpaceUp France is an “Association loi 1901” who organizes events about Space.

SpaceUps are un-conferences: the attendee are not selected, and will not only “attend” but also participate. Anyone, no matter their background, capabilities, job, age or origin, as long as they are motivated and interested, may give a talk or even moderate a panel.



The first French SpaceUp was held in May 2013 at the Parisian headquarters of the European Space Agency (ESA). The second one was held at Cité de l'espace in Toulouse in Sept. 2014. In 2015, SpaceUp X was on November, in Palaiseau on the campus of Ecole polytechnique. In 2017, a SpaceUp occurred in Toulouse in February at ISAE-Supaero. In 2017 we had also a Mini SpaceUp in Paris.

SpaceUp organized 2 Yuri's Night in Toulouse in 2017 and 2018.

Now, on the last Thursday of every month, informal meetings are taking place in a bar in Cannes, Paris and Toulouse to talk about Space: *TheLastJeudi*



Open Space Makers



FEDERATION
Open Space Makers

Open Space Makers is a nonprofit association which was initiated by CNES to support the development of the Federation initiative. With an all-volunteer team which anyone can join, it contributes to building the "infrastructure" for open source space hardware projects to multiply and thrive in all collaborative making locations.

Its action is based on 4 pillars:

- a framework which encompasses both legal and ethical aspects: the Federation charter
- a web platform which will serve as a base to inform about the initiative, to support teams through collaboration and project-management tools, and to publish the open source results of projects
- communication to build a network of collaborative making locations (fablabs, makerspaces, hackerspaces and others), enthusiasts, institutional parties, companies, non-profit organizations... all gathered around enabling on a large scale the making of open source space hardware
- direct support to projects, through material, financial and skill transfer support.

Sponsor

Centre National d'Etudes Spatiales



Founded in 1961, the Centre National d'Etudes Spatiales (CNES) is the government agency responsible for shaping and implementing France's space policy in Europe. Its task is to invent the space systems of the future, bring space technologies to maturity and guarantee France's independent access to space.

CNES is a pivotal player in Europe's space programme, and a major source of initiatives and proposals that aim to maintain France and Europe's competitive edge. It conceives and executes space programmes with its partners in the scientific community and industry, and is closely involved in many international cooperation programmes—the key to any far-reaching space policy.