

space for inspiration



BILBAO
29-31 October
2018

be part of the story

PROGRAMME

PRE-CONFERENCE

Mon, 29 October 2018

18:30 **Getting ready – Registration**

Networking – Wine & Mingle

Welcome remarks by host country representatives

Opening of exhibition

Meet our exhibitors: multi-disciplinary start-ups, academia and space and non-space savvy entrepreneurs.

DIGITS*: Music, science and astronauts

Luis Luque, violin teacher and member of the European Low Gravity Research Association.

DIGITS: New inspirational perspectives

Benjamin Davis, Davis Group

21:00 **End**

* DIGITS: Disruptive Ideas Growing Innovation Towards Sustainability

Insights into the emerging space ecosystem built by visionaries, and business opportunities with ESA in a global marketplace. Targets: low-Earth orbit and the Moon.

08:00 **Registration**

09:00 **Kick-off**

Moderator: Sarah Cruddas

09:10 **Pave the way**

Current achievements and future steps of [ESA's space exploration programme](#). David Parker, Director of Human and Robotic Exploration, will highlight opportunities to work with ESA for space exploration shareholders.

09:30 **Exponential growth**

Leadership, decision-making and high performance in times of immense change. [David Roberts](#), one of the world's top experts on disruptive and exponential technology, brings you his passion and expertise to achieve greater potential.

10:10 **Space goes commercial**

Not far from Earth, there is an emerging ecosystem for commercial research and applications. Achievements, concerns and future plans for the International Space Station – and beyond.

Moderator: Bernhard Hufenbach, ESA

Presentations from:

- Oliver Juckenhoefel, Airbus Defence and Space
- Walter Cugno, Thales Alenia Space
- Timo Stuffer, OHB
- Jeffrey Manber, Nanoracks

10:50 **Coffee break & networking opportunities**

11:20 **Space goes commercial(cont.): panel discussion**

- Sam Scimeni, NASA
- Christian Ziach, High-Tech Gründerfonds Management GmbH
- Ken Savin, CASIS
- Sam Waes, Verhaert
- Sam Adlen, Satellite Applications Catapult

DIGITS: New elements for rocket systems in Commercial Orbital Transportation Services (COTS)

Raúl Torres, PLD Space

12:00 **Exploring life in the universe**

[Ray Jayawardhana](#), Dean of Science and Professor of Astronomy at Cornell University offers an innovative perspective on one of the most inquisitive questions driving the exploration of space – the origin of life in the universe.

12:30 **The Exploration effect – Benefits for society and business**

Advice on how to bring user communities to the space exploration world. Established companies will pitch leading examples and discuss key factors for success in renewable energies and human health.

- Rudy Aernoudt, European Commission DG-GROW.
- Leslie Budd, Open University
- Marybeth Eden, NASA
- Francesc Gòdia, Universitat Autònoma de Barcelona, MELISSA

DIGITS

[Juan Ruiz de Gopegui](#) and [Eduardo Urgoiti](#), SENER.

13:15 **Lunch break & networking opportunities**

14:15 **Splinter sessions**

| | | | |
|-------|--|---|---|
| 14:15 | Space exploration: a driver for new habitats <i>Hosted by Skidmore, Owings & Merrill LLP (SOM)</i> | 60 minutes to innovate <i>Hosted by KIM & Verhaert</i> Technology transfer between space and non-space industry and how the ESA Broker Network supports this activity. | Business opportunities from the megatrends <i>Hosted by ESA</i> |
| 15:00 | Change to the next sessions | | |
| 15:10 | Training opportunities for ESA commercial partners <i>Hosted by ESA</i> | Investors & Space Exploration Masters <i>Hosted by ESA</i> European investment, innovators and new players in the space sector. | The opportunities of Space Resources utilisation <i>Hosted by the Luxembourg Space Agency</i> |

16:00 **Networking break**

16:30 Our eyes on the Earth's companion: Fly me to the Moon

Sergio Montúfar, former official astro-photographer for Ciudad de La Plata Planetarium in Argentina, will propose a 3D trip over a lunar mosaic.

16:50 Growth hacking the moon – A business case

Growth hacking identifies the most efficient ways to grow a business in rapid experimentation across sectors. Private sector pitches on how to develop the lunar ecosystem will be followed by a discussion with ESA Director General Jan Wörner on how to growth hack the Moon Village initiative.

Moderator: Sarah Cruddas

- Kyle Acierno, ispace
- Agata Jozwicka-Perlant, Arianegroup
- Robert Boehme, PTScientists
- Gary Lay, Surrey Satellite Technology Limited
- Mathew Cosby, Goonhilly Earth Station Ltd
- *Skidmore, Owings & Merrill LLP, TBD*

One-to-one interview with ESA's Director General, Jan Wörner

17:40 Space exploration: aiming for Mars

Héctor Guerrero Padrón, Instituto Nacional de Técnica Aeroespacial (INTA)

DIGITS: Science visualisation

Yuri Tanaka, Tokyo University of the Arts

18:00 End of the Business Opportunities Day

18:15 Space Exploration Masters: Awards Ceremony

19:30 Departure of busses to dinner location

19:45 Dine and discuss

Building safe pathways to implement innovative technologies for space exploration.

08:00 **Registration**

08:45 **Opening of day 2**

Moderator: Sarah Cruddas

08:50 **Disruptive solutions – An international perspective**

Global engagement opportunities in space and how disruptive technology innovation may alter current thinking. Discussions between representatives from the International Space Exploration Group (ISECG).

Moderator: Sarah Cruddas

Presentation by M. Lauster, Fraunhofer Institute

Panel discussion:

- Naoki Sato, JAXA
- Kathy Laurini, NASA
- Christian Lange, CSA
- Stefaan De Mey, ESA

09:35 **Making exploration real – On Earth**

New solutions to de-risking space exploration missions while building networks and securing businesses. Analogous activities to optimise scientific and technological needs in robotic and manned missions to the Moon or Mars.

Moderator: Francesco Sauro,
Geologist, explorer, expedition leader, consultant for ESA

Presentation by Bjarne Ingels, Bjarke Ingels Group

Panel discussion with:

- Victor Parro Garcia, Instituto Nacional de Técnica Aeroespacial
- Melanie von der Wiesche, DLR
- Vadim Guschin, Institute Biomedical Problems
- Pierre Crespi, Air Liquide

10:35 **Coffee break & networking opportunities**

11:00 **Space exploration and accelerated digitisation**

Inma Martínez, Venture Partner at Deep Science Ventures, the UK's first venture-builder for science-driven companies, illuminates the audience on how to financially bet on innovation.

11:40 Splinter sessions

| | | | |
|-------|---|--|--|
| 11:40 | Health technology to innovate <i>Hosted by STFC</i> An insight into the transformative synergy between the space and terrestrial healthcare disciplines. | Robotics – Open for partnerships | Space transportation to innovate <i>Hosted by Ariane Group</i> |
| 12:25 | Change to the next sessions | | |
| 12:35 | <i>To be confirmed</i> | Key-enabling technologies for Small-Sat <i>Hosted by SSTL/Argotec/GOMSpace</i> | Spaceship EAC <i>Hosted by ESA</i> |

13:20 Lunch break & networking opportunities

14:20 How to efficiently introduce new technologies into the market?

Ying Zhang, Rotterdam School of Management

14:40 Fearless dreams from young generations

Outcome of the children’s contest “Designathon”.

DIGITS: Domingo Escutia, ESERO SPAIN-ESA - Parque de las Ciencias

14:55 Making space missions possible

International cooperation and engagement of new players.

Paolo Nespoli, ESA astronaut

15:25 Now, New, Next

Key outcomes of the splinter sessions (by sessions chairs).

Summary of key achievements and promising initiatives by David Parker, ESA Director of Human and Robotic Exploration.

16:00 Networking – Wine & Mingle

17:00 End of conference