

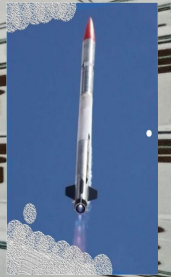
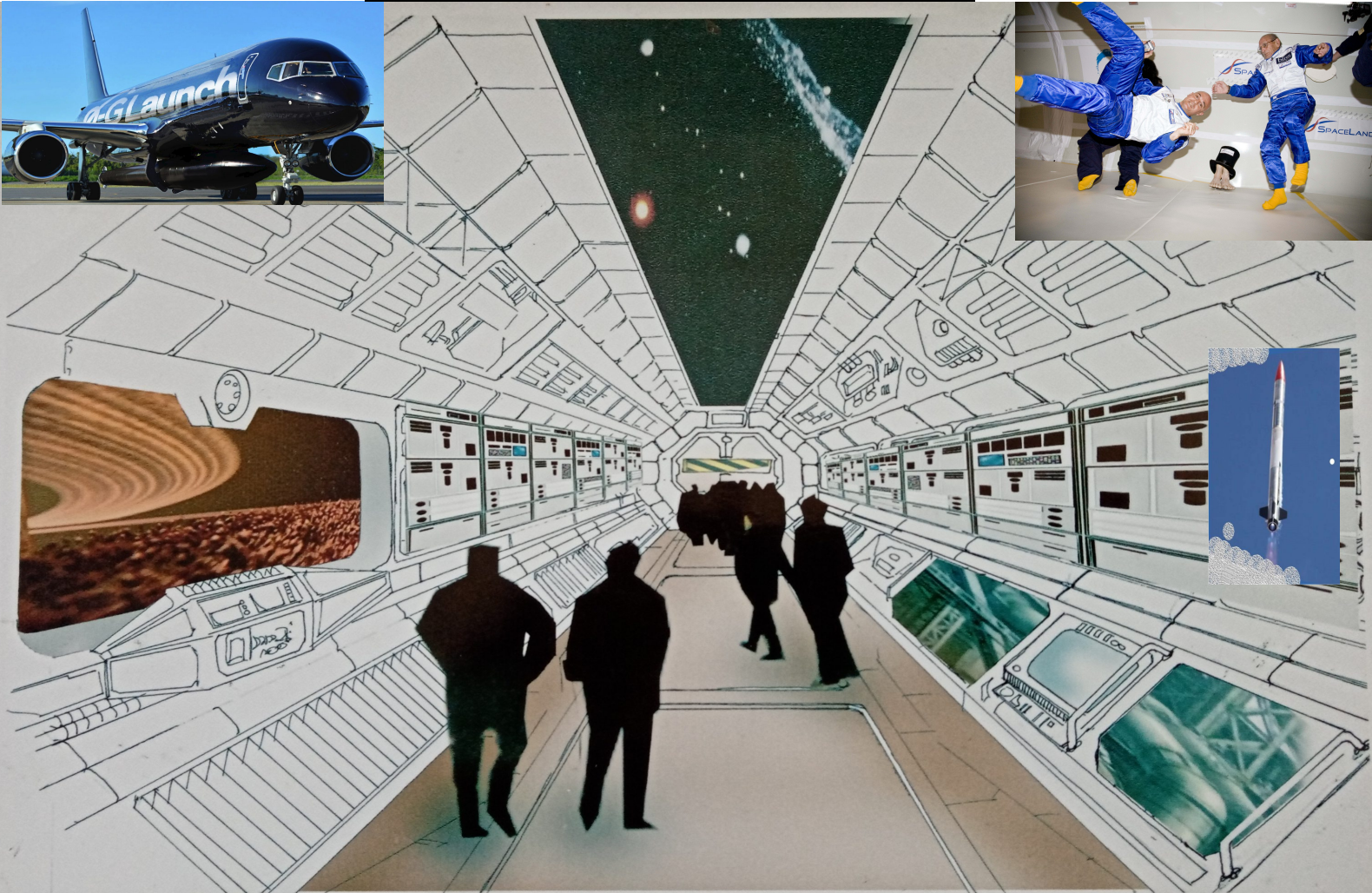


Patronage of

Città di
SAVIGLIANO



Associazione
Nazionale
Ingegneri



4th IAF SpaceLand meeting

Savigliano (Cuneo, Italy), Monday 18 September 2023

Presenting the SpaceLand Center, a unique "Aerospace Public Hub" to reach *sovereign aerospace capability & democratize access to Microgravity and Aerospace operations, contributing to enhance life quality on the Earth, for All*

The event also hosts the ASI Portal "*Distretto Virtuale 2023*" workshop (*North-West Quadrant*) and showcases the mobile demo Moon habitat "*ExoSpaceHab-X*" visitable by all participants

PROGRAM & APPLICATION FORM



Patronage of

Città di
SAVIGLIANO



Associazione
Nazionale
Ingegneri



Announcing One-Stop Port for Microgravity S.T.E.A.M.M. & Air-launching to Space all in one site at the *SpaceLand Center*

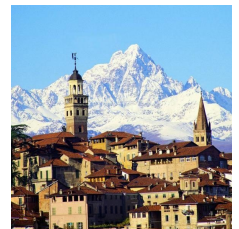
4th *SpaceLand IAF Event* → Auditorium **Crosà Neira**, piazzetta *Misericordia*, Savigliano (Cuneo- Italy), 18 September 2023

Aerospace business stakeholders and microgravity flight veterans openly discuss with experts in planetary exploration and satellite launch services values & benefits of novel infrastructures for microgravity S.T.E.A.M.M. (Science, Technology, Engineering, Arts, Math, Medicine) and air-launching systems. Surrounded by stunning Alps, medieval villages & roman-baroque architectures, not far from the Italian Riviera, the venue will also welcome the general public interested in the SpaceLand Center project: a novel hub to engage all possible users to prepare people and hardware for low-cost research and test programs in Mars-gravity, Moon-gravity, "0-G" and to aero-launch satellites & hypersonic vehicles all in one site, first time for Europe → new high-tech jobs, knowledge, "green" socio-economic growth & investment opportunities

- Democratizing access to Microgravity, Mars-G, Moon-G S.T.E.A.M.M., Sub-Orbital and Orbital Space
- Capitalizing on the SpaceLand records at NASA, also set for the winner of the Nobel Prize for Medicine (see last page poster)
- Showcasing underwater, ground, flight infrastructures: Neutral Buoyancy & Low-G systems, Mars & Moon Habitats, reusable Rockets
- Engaging cultural cross-feeding and non-Space entrepreneurs (food, textile, tourism) into an eco-sustainable Space Economy
- Discussing the role of Italian institutions, starting from the Italian Space Agency's Distretto Virtuale

PROGRAM

- 10.00: Welcome by Antonello Portera, Mayor of Savigliano, with local Authorities and greetings from ASI
- 10.10: Christian Feichtinger, Director General of the *International Astronautical Federation* (IAF)
- 10.20: Cristina Leone, President of the *Italian National Aerospace Technology Cluster*
- 10.30: Alessio Toneguzzo, President of the *Italian National Association of Engineers*
- 10.40: Piergiorgio Odifreddi: *Zero-G mathematics in orbital and sub-orbital parabolas*
- 10.50: Nandu Goswami: *When Spaceflight meets Geriatrics*
- 11.00: Bernard Foing: *EuroMoonMars research and parabolic flights synergy*
- 11.10: Celeste Petraroli: *SpaceLand City showcasing the first Space-themed mixed-use real estate*
- 11.20: John Quinn: *Exos SpaceLand team for Europe's first reusable rockets launching from European soil for the first time*
- 11.30: Carlo Viberti: *From underwater to Space: what benefits from, and how to invest in the SpaceLand Center*
- 11.45: Questions & answers with journalists, entrepreneurs and investors
 - Lunch break (at typical trattoria steeped in Piedmont tradition - for attendees registered via application form - own transport)
- 14.30: Giacomo Sciortino - *ASI Distretto Virtuale's annual North-West workshop*
 - . Evolution of the Portal
 - . Engagement of local representatives
 - . Presentation of joint ventures and initiatives
 - . Round the table discussion, Q&A, followed by One-to-one meetings of ASI D.V. participants
- 17.00: end of event



The SpaceLand Center represents a significant leap for Microgravity S.T.E.A.M.M. R&D and low-cost air-Launch services:
it hinges on *SpaceLand world records* set in the last 2 decades on trail-blazing flights from NASA KSC (see last page) and will feature:
→ Europe's 1st ground, underwater & flight infrastructure to prepare and launch people & hardware in zero-G and towards orbit
→ Europe's 1st Mars habitat upending the conventional building process with *spin-offs* for the housing construction industry
→ Europe's 1st site for reusable air-launching rockets, preparing *first-ever* air-launches of satellites from European soil

The *SpaceLand Center* can also increase **sovereign operational capabilities for Space** and **enhance life quality for All**, not only by triggering high-tech jobs and scientific knowledge, novel education, biomed discoveries and technology innovation, but also contributing to an eco-sustainable GDP, lowering living costs to taxpayers and giving European citizens full autonomy in a critical geopolitical environment, with better means to grow and best steer own destiny



Patronage of

Città di
SAVIGLIANO



Associazione
Nazionale
Ingegneri



SAVIGLIANO prima Città della Microgravità



Il testimonial SpaceLand, Ing. Carlo Viberti (sx) con il Comandante dello Space Shuttle Rick Searfoss, per le prime missioni del programma "NASA Microgravity Pathfinder Flights": esperimenti svolti da SpaceLand per varie Università e Politecnici italiani e per gli scienziati del Premio Nobel per la Medicina, Le Moaléc

anche in ITALIANO

4th SpaceLand IAF meeting

free entrance for registered participants - *ingresso gratuito per tutti (previo accredito)*

Auditorium Crosà Neira, piazza Misericordia, Savigliano - Cuneo - Italy)

10.00 a.m., Monday, 18 September 2023 - la mattina di lunedì 18.9.23, ore 10

- ➔ Investors, regional space companies and international space business stakeholders will meet and network with local communities and non-Space-related attendees to dwell on the *holistic benefits* which the *open-door SpaceLand Center* in Savigliano will generate to the territory and future generations, enshrining the dawn of the **Space Knowledge Economy**
- ➔ An outstanding balance of actors and experts, with all levels of the value chain represented, will discuss how to cooperate in a novel infrastructure, trail-blazing a new approach to microgravity research, education & satellite operations for private and public sector organizations: cutting-edge initiatives to be activated also for objectives such as national security, scientific research, space debris mitigation, Earth observation, natural disasters / climate / resources monitoring, facilitating modern agriculture, alpine economy and all kinds of ICT communications, while at the same time stimulating new science, biomedical discoveries and tourism innovation: at the *SpaceLand Center*, **affordable access to Space-like environments** will be everyday life, **democratizing Microgravity S.T.E.A.M.M. R&D and Aero-Launching services, for All**

LO SPAZIO PER LA VITA SULLA TERRA, con SAVIGLIANO PROTAGONISTA

www.SpaceLand.it



Patronage of

Città di
SAVIGLIANO



An unprecedented event for unparalleled opportunities with top-level speakers (in speech order)

Only 1 Country in EU carries out crewed microgravity flights and no company has ever launched a satellite from the European continent: that is why, after setting several records in microgravity with people at any age, SpaceLand is relocating its know-how, team of experts and assets to fill such gaps and build history-making open-door Space-bound infrastructures for all citizens, democratizing Space for real, and ushering in the next era of the Space Knowledge Economy.

Christian Feichtinger: Executive Director of the IAF, PhD in space experimentation from Graz Technology University (AU), served as senior advisor on Space exploration at ESA; was Head of the permanent mission in Russia, after being ESA representative for human spaceflight and exploration in Moscow for 10 years and lead manager & liaison officer for the EUROMIR-94 and 95 missions in Russia as well as for Austria spaceflights.

Cristina Leone, President of the Italian National Aerospace Technology Cluster, works as Senior Manager of the Technology and Innovation Office at Leonardo and acts in several fields, also as advisor to the European Commission on R&D issues in the sectors of security and defense.

Alessio Toneguzzo: Councilor and President of the Order of the Engineer of Torino until 2021, he is President and co-Founder of Italy's National Association of Engineers, a novel entity in the Country which created the concept of holistic engineering through geniuses like Leonardo Da Vinci

Piergiorgio Odifreddi is an Italian mathematician, logician and essayist, author of books related to mathematics, science popularization, history of science, philosophy, politics and religion. He will give a fascinating overview of zero-gravity math, explaining how to create weightlessness.

Nandu Goswami: teaching and leading major biomed R&S projects at the Medical University of Graz (Austria), Doct. Goswami is an expert in commonalities between astronauts' health issues and elderly's pathologies related to same physiological areas: he will address the relevance of life science research in "0-G", e.g. the human longevity extension research flights conducted within the SpaceLand program.

Bernard Foing: C.E.O. of LUNEX EuroMoonMars, former ESA SMART1 lead scientist and chair of IAF "ITACCUS", Prof Bernard Foing will describe the synergy between EuroMoonMars programme and SpaceLand parabolic flights: "We train the next space generation with data analysis, technology, field test, astronauts training, space habitat simulations, humanities and arts, business and entrepreneurship, with EU funds for partner universities and Foundations for the EuroSpaceHub consortium to develop these activities further, in line with our *Space4all* initiative",

Celeste Petraroli: one of the first Italian "Space Techno-Architects", has supervised all the facilities for international media at the 2006 Winter Olympics in Torino; now leading the design of the SpaceLand Center infrastructures and environments, she is also Managing Architect for the development of "SpaceLand Cities", i.e. innovative "mixed-use" green-energy-powered real estate adjacent to respective SpaceLand Centers to cater for the need of business-class housing, Space-themed offices, P.R. spaces and commercial services for users engaged in the Space Economy.

John Quinn: having a background in engineering and aerospace, he is CEO and co-founder of Exos Aerospace, a U.S. company with a subsidiary in Italy that develops reusable launch systems for space exploration and research. Teamed up into the SpaceLand Center's program to integrate and launch payloads for 0-G & space environment tests on sub-orbital flights, Exos with SpaceLand is growing as a major rocket-launching group operating eco-sustainable rockets for 0-G experiments and going to launch satellites for the 1st time in history from European soil.

Giacomo Sciortino (ASI Direzione Generale Staff - Responsabile Linee Finanza Integrativa, Distretto Virtuale e Comunicazione - CUG): Manager of ASI's Integrated Finance and "Distretto Virtuale" Portal, supporting information interaction within the Italian Space Business and Science Community for the sector's technological and economic mapping and the promotion of its activities according to territorial vocations

During the event, the **SpaceLand Lunex EuroMoonMars** alliance will showcase the **novel demo Moonbase "ExoSpaceHab-X"**, coordinated by ESH-X designer Serena Crotti: visitors accessing it will get an understanding on how to train to live, work on the Moon, develop experiments, cooperate over disciplines involving Countries with smart systems reproducing lunar base conditions, and prepare for the future on *Space4all* on Earth and beyond, in synergy with SpaceLand's Moon-gravity flight program: **next flight opportunity**, open to **All**, will be in **December** at **NASA** in Florida, organized by tour operating partner **GoWorld**: www.goamerica.it/viaggi/go-world-universe-viaggio-nello-spazio-in-assenza-di-gravita/

Moderator: Carlo Viberti. Graduated with full marks *cum Laude* at the age of 24 from *Politecnico Torino* to begin an almost 40-year-long career in human spaceflight programs, worldwide, in 2000 was proposed by U.S.-Russian group *MIR Corp* as *history-1st private cosmonaut-engineer nominee*, for the dawn of the commercial human spaceflight era <https://spaceref.com/press-release/mircorp-italian-company-discussing-citizen-explorer-flight-to-mir/>. Worked at ESA as Lead-Engineer of the Astronaut Activities Office and Chairman of Europe & Italy's technologies for the International Space Station phase 1 on the orbital base *MIR*; in 2005 was the first non-U.S. citizen to fly for the *NASA's Microgravity Pathfinder Flight program*, leading research in "zero-G" also for experiments with his 11-yr-old son *Kim Marco* for the **Nobel Prize winner** *Levi-Montalcini*. The Head of ASI in 2008 proposed him to *Virgin Galactic* as 1st sub-orbital R&D astronaut: given the 15-year-delay in the program, became Head of the *SpaceLand City & Center project* to further expand opportunities for laypeople, also with disabilities, to fly in microgravity with scientists and innovators for cutting-edge research



Patronage of

Città di
SAVIGLIANO



4th SpaceLand IAF event (18 Sept. 2023) - APPLICATION FORM

CAPITAL LETTERS, please

FAMILY NAME: _____ NAME (first name): _____

E-mail address: _____ @ _____

I am (choose one):

- INVESTOR / ENTREPRENEUR
- SCIENTIST / RESEARCHER / TECHNOLOGY INNOVATOR / TEACHER
- MEDIA
- STUDENT
- Other: (please specify) _____

interested in the following (pick one; if more, please number your first priorities with 1, 2, etc.):

- Planetary exploration (robotic and crewed systems, space labs and habitats, textile and engineering)
- Microgravity STEAMM (science, technology, engineering, arts, math & medicine) R&D opportunities
- Satellite aerial-launchers, rockets and orbital clean-up systems
- Astronaut health, fitness, nutrition and spin-off's to everyday's life on Earth
- Space Tourism, space-fashion and space-culture business
- New series of Mars-gravity, Moon-gravity, Zero-G open flight campaigns from Italy
- Entrepreneurship and Finance for the above sectors

PARTICIPANT'S DETAILS

Entity / company / institution (if any): _____

Role/function _____, address (square/street, nr. _____

Post code / ZIP: _____ Town _____

Province/County: _____ State / Nation _____

Land-line phone nr: + _____ Mobile: + _____

Passport nr.: _____ Valid until (dd/mm/yy): _____

Reserve for me & (0 to 5) ___ persons for lunch (please reply by choosing respective answer herebelow)

. please send me coordinates to pay **38 EUR** each (contribution to the event, wine and food included, except transfer) (YES / NO) _____
. or (pick one) I will pay **50 EUR** per person at the event, during the check-in (ditto as above) (YES / NO) _____

I will also participate to the 2023 territorial workshop (North West Quadrant) of ASI's Distretto Virtuale (YES / NO) _____

Signature date (dd/mm/yy): ____/____/____ Readible signature: _____

Patronage of



Città di SAVIGLIANO



Record-breaking crew-members selected among the general public, trained and brought to fly by SpaceLand team led by former ESA-zero-gravity test engineer and Space Station MIR European Technology Experiments Coordinator Doct. Carlo Viberti for biomedicine, technology and/or bioengineering experiments commissioned by Nobel-Prize-winner led groups, taking off from the NASA Space Shuttle L.F. (Kennedy Space Center, Cape Canaveral, Florida)

World's youngest kid as research test subject in zero-gravity: 11 yrs old

11-year-old Kim Marco Viberti flew in 2008 as test subject for neurobiological sampling experiments related to studies on neuropathologies such as the Alzheimer's syndrom, commissioned to SpaceLand by the European Brain Research Institute led by dr. Rita Levi Montalcini (Nobel Prize winner), Italian State Health Institute (ISS), Italian State Research Center (CNR) and University of Milan (I); results reported in scientific paper issued for the European Low Gravity Research Association's Congress in Bonn (D).



Left : free-flying break between sampling, right: interview by Italian State TV "TG1" prime news report

World's oldest man in zero-gravity: 93 yrs old

93 year old man, flying as test subject for bioengineering experiments commissioned by the Don Gnocchi Science Foundation's Bioengineering Center of Milan (image from CNN TV news report)



Images show footages from CNN TV reports

World's 1st disabled for technology tests in zero-g

100% disabled woman as test operator for hand-free ICT control systems commissioned by AIDA Modena ("Informatic tools for disabled and elderly")



Footage showing Elma operating at the SpaceLand technology payload rack, broadcasted by the Italian State TV "RAI2" and Mediaset TG 4 news reports

First non-US citizen taking off from NASA Space Shuttle L.F.

SpaceLand Flight Mission Commander Eng. Doct. Carlo Viberti is the 1st non-U.S. citizen authorized to take off for microgravity research flights from the NASA Kennedy Space Center. He has been formally proposed by the Head of the Italian Space Agency to fly as 1st Astronaut-Engineer on the first sub-orbital research flight campaigns. The program has been presented with guest lectures in Oxford at the 1st UK Space Agency's workshop on microgravity and the 1st Space Commerce Summit in 2013 in London with NASA



Left: footage from RAI and Swiss State TV ; right: Viberti with Space Shuttle pilot Rick Searfoss, possible crew of first sub-orbital research flight: being endorsed by the ASI President

- SpaceLand / Carlo Viberti have been awarded, inter alia, the following prizes:
- . European "EOS" Award for Innovation Policy, by the European Commission
 - . Prize "Torre di Castruccio" - Gold Medal by the President of the Republic of Italy
 - . Prize "Etica ed Impresa" by Italy's Federmanagement and AssoQuadri associations
 - . Italian Aeronautics and Astronautics Association Award
 - . Finalist rank for Italy's ConfCommercio "Innovation Prize" and several other awards

Underwater Training Camp for Italian Space Agency & University of Cagliari's Lunar exploration technology programs

Footages from Italian State TV documentaries broadcasted on RAI 2 TV. (search for videos on U-Tube and Google key words "SpaceLand Viberti")

