Le Pavillon

^{22.06.2024} –26.01.2025 Stellar ~Scape

New Space Exploration Humankind has long held a deep fascination for space, with its far-reaching skies that captivate and mesmerise. While the Anthropocene Crisis undermines our environmental, technological and democratic stability, this **Night Land*** represents the final frontier to colonise, a resource to harness, a tourist destination, a long-range surveillance observatory, and a space debris junkyard — and will forever spark an infinite constellation of fundamental questions and (meta)physical musings.

From atomic fragments to the great expanse of the universe, the **Stellar Scape** exhibition treats space as an exploratory, imaginary, scientific, environmental and political topic, bringing together over twenty international artists, researchers and engineers to take us on an imaginative journey through astronomy and a revival of space adventures known as New Space. Through art installations, immersive environments, scientific innovations, and speculative design, we can experience this ever-expanding starry landscape — a reflection of the cosmic connection that binds us within a single space to all those things that appear not only as they are, but as they could be.

STELLAR LAB

In a space where art, astronomy, and their associated technical advances come together, Stellar Lab at the Pavillon opens the floor to interactions between meteor fragments, orbiting observation devices, smart textiles, robots and phantasmagorical machines.

Faced with the ethical, geopolitical and environmental challenges of the New Space era, the Lab acts as a reminder of how important it is to build a common scientific culture to gain an appreciation of citizen governance and ownership issues relating to this much-coveted territory and let our universal questions be heard.

*Capitaine futur and the Pays de la Nuit

Stellar Scape is an invitation to Capitaine futur (Captain Future), an imaginary being with narrative superpowers created at Paris's Gaîté Lyrique by Jos Auzende, whose voyage into the Pays de la nuit (Night Land) is a chance for both young and old to reach out to unknown stars and planets via a series of thoughtful, interactive installations that need to be experienced firsthand.



Pavillon



01 Kongo Astronauts Michel Ekeba et Eléonore Hellio (COG, FR)

Waiting For The Sun Spacewalker, 2023 Sculpture, electronic circuits, fabric, steel wire, found objects and black aerosol paint

Waiting For The Sun Spacewalker features a diving suit and spacesuit made from electronic detritus that regularly ends up in the Democratic Republic of the Congo from the Western world. The artists remind us of our existence which is entirely dependent on our distance from the sun — the very essence of life. It also bears witness to a call for a better future for Africa — a continent that acts as a laboratory for modernity, featuring explorers with dreams of a more breathable and equitably shared atmosphere.

Based in the suffocatingly oppressive supercity of Kinshasa, this transmedia art collective brings the symbolic figure of an astronaut to life, shining a light on postcolonial complexities, hostile urban realities and climate vulnerabilities in the Anthropocene era, as well as hastening progress towards an alternative future.

02 Félicie d'Estienne d'Orves (FR)

Soleil (~ 8 MN), Mars (3 à 22 MN), Uranus (2H23 à 2H55), "Étalon lumière Series", 2016 Kinetic sculpture, steel, LED, computer program

In collaboration with Fabio Acero, astrophysicist (AIM / CEA)

Ephemeris data NASA

Co-production Bipolar - Maison Populaire Calculated using the 1792* standard definition of a metre, the Étalon lumière introduces the core concept of cosmic time as it relates to natural cycles. Each module corresponds to an object within the solar system and tracks the changing time taken by light to reach the Earth through the course of the year: around 8 minutes for the Sun, 2 hours 40 minutes to 3 hours for Uranus, and between 3 and 22 minutes for Mars.

Through continuous motion, the sculptures highlight how we perceive time and how oscillation amplitude varies from one planet to another. In the entropy of space, the standard measures illustrate our belonging to a planetary system and the physiological relationship between species and light.

*

one metre equals one tenmillionth of a quarter of the distance from the Equator to the North Pole, based on the calculation methods of Delambre and Méchain.

O3 Agnes Meyer-Brandis (DE)

Moon Goose Colony, 2011— Multimedia installation, digital video file, original Moon Goose eggshells, 11 Alu-Dibond photographs and flags

Moon Goose colony is inspired by the novel "The Man in the Moone" by British author Francis Godwin, published in the 17th century, which was a precursor to the science fiction genre. The protagonist flies to the Moon on board a chariot pulled by moon geese.

Now, four centuries later, a German artist has combined design fiction, science, poetic vision and legends from the past, present and future to set off on a journey following in the wingbeats of this fantastical migratory species. In an environmentally respectful analogue*, she has taken on the gentle responsibility of mother goose, raising and training eleven geese from the point of hatching and naming them after illustrious astronauts. Activities within this *Zone Imaginaire à Défendre* (imaginary defence zone) include observing dandelions growing in non-directional gravity, an introduction to digital communication using Skype and behavioural data collection.

04 Félicie d'Estienne d'Orves (FR)

SOL 24H39MIN 35S (Gusev Crater and Endeavour Crater - "Martian Suns" Series), 2019 Bas-relief in plaster, metal, LED, electronics and motor, 115 × 75 cm

Production Le Fresnoy -Studio national des arts contemporains, Point Triple

Scientific collaboration and data Dr François Forget LMD/ Laboratoire de Météorologie Dynamique (CNRS) Each sculpted relief corresponds to the landing point of an American probe on Mars, located at different latitudes: Gusev Crater (Spirit, 2004-2010) and Endeavour Crater (Opportunity, 2004-2018). Individual motorised lighting tracks the average solar day length on the Red Planet, i.e. 24 hours, 39 minutes and 35 seconds. The two bas-reliefs are a faithful representation of these images and of the intensity of light measured based on the height of the sun *.

Blending light, sculpture and technology, Félicie d'Estienne d'Orves puts the emphasis on astrophysical space, the study of natural light cycles and remote visual processes.

> as part of a study carried out by the Mars Climate Database Project/Jussieu

05 Véronique Béland (CAN)

Recombinaison, 2015 Interactive installation, computer program, capacitive sensor, printer, breach caused by meteorite impact

Design and production Véronique Béland

It development Guillaume Libersat

Woodwork Pierre Phelippon This interactive installation invites the visitor to tune in to a meteorite -a memory fragment of the solar system before planets were formed. By placing a hand on a tactile sensor connected to this extraterrestrial asteroid, we experience the poetic pleasure of receiving a personal message that takes the form of a text generated by the flow of radio waves emanating from the cosmos.

Véronique Béland is interested in spatial properties where sound is absent but, surprisingly, where electromagnetic waves emitted by heavenly objects as ghosts of radio waves — used for communications between satellites and the Earth — have no need of physical media to travel unhindered through the void. These can be detected and captured by a radio telescope.

06

Mont Dieu (France) M143a1 IG30590 iron, IIE meteorite, 348 gram M481a IG.31669 NWA6782, 356 gram The Royal Belgian Institute of Natural Sciences, Brussels

07 Katie Paterson (SCO) Timepieces, 2014

Timepieces, 2014 Kinetic sculptures, 9 modified clocks

This series of nine clocks encourages the viewer to reconsider relativity when measuring time in our daily lives. Individually calibrated relative to the time on Earth, the clock faces show the actual time on each planet within our solar system. Depending on celestial cycles, solar day and night lengths vary wildly from one planet to another, with the shortest being on Jupiter (9 hours and 56 minutes) and the longest on Mercury (4,223 hours):

> Mercury 4,223 hours / Venus 2,802 hours / Earth 24 hours / Moon 708 hours / Mars 24 hours 40 minutes / Jupiter 9 hours 56 minutes / Saturn 10 hours 39 minutes / Uranus 17 hours 14 minutes / Neptune 16 hours 6 minutes.

08 Amélie Bouvier (FR)

PHP Potentially Hazardous Portraits [PHP#3, PHP#13, PHP#14, PHP#15, PHP#18], 2020-21 Drawings in ink, graphite and coloured pencil on paper

Way above our heads, whirling around our solar system, some heavenly bodies are venturing dangerously close to Earth. According to space agencies, if these "potentially hazardous objects" (PHOs) were to hit Earth, they could cause catastrophic destruction and could even result in our extinction. It's a high-stakes game of roulette which could bring everything to a brutal end. The Potentially Hazardous Portraits (PHP) series takes its name from these menacing asteroids. Part rock part creature. each drawing floats in a pure white aura held on mesh netting, while sketches and enlargements reveal scientific-style diagrams showing bacterial life forms as memories of our planetary heritage contained in the rock.

09 Katie Paterson (SCO)

Earth-Moon-Earth (Moonlight Sonata reflected From the Surface of the Moon), 2007 Sound installation, Yamaha Disklavier, baby grand piano, MIDI file (5 min 54 sec)

When space composes its own music... The sheet music for Beethoven's Moonlight Sonata — the classic romantic piano piece — is transformed into Morse code and transmitted to the Moon. Reflected by the craters and irregular surfaces found on the Moon, the data sent from Earth is modified and displaced, bringing a sense of imbalance to our minds. The new sheet music is played on an automated piano, creating space for intervals, distortion and silence. Using this back and forth motion, the Scottish multidisciplinary artist reminds us of the emotional connection we have with our only natural satellite.

10 Caroline Le Méhauté (FR)

Négociation 109 – Croître en Silence, 2021 Sculpture, peat from Normandy, Okoumé wood and acrylic binder

With support from the Centre Wallonie-Bruxelles cultural centre in Paris

Representing a metaphor for a relationship with the world that is constantly in question. Négociation 109 is a mysterious obelisk. In ancient Egypt, these columns symbolised a fixed ray of sunlight. It's precisely because we are in a particularly favourable location in space, bathed in the intense rays from this extraterrestrial agent, that life is possible. A ray of sunlight also contains cosmic rays originating in space from an undetermined source. Voyager 2 has been detecting these rays with help from its Cosmic Ray System since its launch in 1977. After leaving the protective bubble of our solar system in 2018, this legendary probe is now heading into the unknown, several billion kilometres from Earth, in the silence of interstellar space on a quest for other sunlight sources.

1 Quadrature (DE) Juliane Götz & Sebastian Neitsch

C.R.E.D.O, Cosmic Radio Engine for Delusional Observations, 2020

Sound sculpture, customised radio telescope, computer, sound system

In collaboration with Christian Losert and Sebastian Müllauer

Thanks to Marco Pasini

Developed within the framework of the #bebeethoven scholarship programme, funded by the Federal Cultural Foundation

In co-production with **ZKM | Hertz-Lab**

Are we alone in the universe? In answer to this unresolved question. an absence of proof is not proof of an absence for this tech-savvv German duo, who set out to build a custom radio telescope, C.R.E.D.O, to examine the depths of space for signs of life. Signals are captured and fed into the artificial intelligence neural network, which has been trained in human theories and assumptions around extraterrestrial life. From the din of mysterious murmurings of the universe, the AI now relentlessly attempts to identify potential messages from faraway civilisations. We find ourselves somewhere between reality and fiction, where scientific knowledge blends with some of our wildest speculations.

12 Plane Scape #15 Yoko Seyama, Wolfgang Bittner, Lyndsey Housden, Jeroen Uyttendaele (JAP, DE, UK, BE)

Plane Scape, 2010-2024 Immersive audiovisual environment, elastic, wood, computer, video projectors, six-channel speakers

For us mere mortals, extra-atmospheric space is a source of both wonder and vertigo. How can we experience this ever-expanding starry landscape, this reflection of our cosmic connection that binds us within a single space? Plane Scape combines sound, image and space-time to weave a three-dimensional representation of an elusive sound- and light-filled universe where we can immerse ourselves. We make our way intuitively, unable to discern top from bottom, front from back. small from large, the future from the past, and without knowing where it will all lead. This playful, disorienting experience seems to represent the Anthropocene era and our uncontrolled swerve towards New Space, where the human adventure finds its way using new signposts among shifting notions of impossibility and infinity.

13 Quadrature (DE) Juliane Götz & Sebastian Neitsch

SCOPE, 2024 Interactive, speculative device, cabin, computer, monitor, printer

With the support of KIKK and the 2021 Berlin Senate Visual Arts Research Grant Since the dawn of humanity, we've been observing the celestial canvas as we would a cinema screen, projecting our own narratives while astrologers interpret them to predict the future. Now discredited by science, astrology remains as popular as ever in our complex and unpredictable contemporary societies.

Enhanced by 7,000 satellites, which already govern our digital existence, and the tens of thousands of space junk items in orbit, reading the New Space skies broadens our belief horizons. Using artificial intelligence, the *Scope* machine analyses the reworked sky to provide a unique horoscope based on time of birth. In this neoscience of divination, objective data meets subjective reality and blends to create an inexorably altered future.

14 Stéphanie Roland (BE)

Le cercle vide, 2022 Installation, film 19 min

Le Fresnoy production

48°52'31" S 123°23'33" W are the coordinates of Point Nemo. In the heart of the Pacific Ocean, this is the most distant place on Earth from any humans — based on the mathematical application of the largest empty circle problem — while also concealing a deep sea junkyard for rusty spacecraft. Nothing can really survive here. The bottom of the abyss is so deep that no light can penetrate. Very few ships pass by. We don't know when the dumping will take place.

Le Cercle vide (the empty circle) is a melancholy essay on the journey of a space object. This starts with the engineer who designs it and forms an attachment until its ascent into the faraway skies before plunging back down to the earthly domain in a planned descent. An inverted science-fiction voyage, this film blends real archives and fictional footage to guide us to the margins of an invisible space and a metaphor for our vanity.

15 Alessia Sanna & Alexandre Weisser (FR)

Leave Space, 2023-2024

Audiovisual generative mapping, installation, 34,679 resin cubes and holographic film, steel armillary sphere, video projectors, audio system, computer Produced during the *Art et Astronomie* residency in Namur, 2023

This sound and light sculpture's spherical form is inspired by the former celestial sphere modelling instrument and is composed of 34,679 items of space debris and active satellites recorded as orbiting the Earth, symbolised by cubic dice shapes. Forecasts estimate that 42,000 satellites relating to the Starlink * internet access provider will soon saturate our low Earth orbit. Do we need to revisit the pessimistic predictions of Kessler, the astrophysicist, who claimed as early as 1978 that we would surpass the threshold of objects that would hamper our abilities to observe and explore space?

This duo of artists/researchers invites us to step back and make space to question our behaviour and visualise this undetectable, exponential pollution. To ensure that the future of space doesn't depend on the roll of a dice.

> belonging to Elon Musk's SpaceX company

STELLAR LAB

FACED WITH THE ETHICAL, GEOPOLITICAL, AND ENVIRONMENTAL CHALLENGES OF THE NEW SPACE ERA, THE STELLAR LAB ACTS AS A REMINDER OF HOW IMPORTANT IT IS TO BUILD A COMMON SCIENTIFIC CULTURE SO OUR CITIZENS CAN GAIN AN APPRECIATION OF THE GOVERNANCE AND OWNERSHIP ISSUES RELATING TO THIS VAST, MUCH-COVETED TERRITORY AND RAISE UNIVERSAL QUESTIONS.

The twenty-first century has opened the New Space era and revived the conquest of space. These conquests are dominated by private sector giants of the Western world, such as Elon Musk (SpaceX), Jeff Bezos (Blue Origin) and Richard Branson (Virgin Galactic), and they represent an ever-expanding interstellar Far West, with billionaire business tycoons replacing explorers, and personal interests taking precedence over the common good, while aerospace research continues to advance. Aside from current developments and market processes, how can we make peace with space exploration, support scientific research and revive a spirit of cooperation? ň

STELLAR LAB is taking this opportunity to highlight imaginative approaches and transdisciplinary applications in business, laboratories and the art world, creating a dialogue between prototypes, models and works of art.

On a European scale, businesses are defying hegemonic positions, with Aerospacelab and Latitude innovating in the satellite market. Liquifer. Spartan Space and Space Applications Services developing applications in lunar exploration, and Aldoria and Amos focusing on space optics. resulting in an emergence of well-defined projects combining science with human ambition. A cooperative approach can be seen in European programmes such as Copernicus, which collects critical data to support the protection of the environment, and the (RE)Connect project that brings design and scientific research together to explore the potential for applying smart textiles to complex communication needs. Finally, the MIT Media Lab, a long-standing player in disruptive geoengineering solutions, invites us to consider how to recycle plastic space waste, which is mushrooming out of control.

16 Jasna Rok (BE)

(RE)Connect, 2020

Smart textile installation, tulle with 3D printed scales and electronics with own design microcontroller

(*RE*)Connect is a connected garment that provides a visual interpretation of emotions based on the human voice and makes them tangible using a series of vibrations. The project was designed by Belgian artist and designer, Jasna Rokegem, with the aim of creating new communication layers between humans, easing comprehension in complex environments such as space exploration. It was presented to NASA's Space Center Houston in 2020 and is the result of a three-year residency at Nokia Bell Labs, one of the world's great research institutions.

17 MIT Media Lab (US)

MicroPET, 2022 Prototype, study of the biodegradability of PET plastics in space

MicroPET is a free-flying payload that enables us to study the process of polyethylene terephthalate (PET) recycling. This plastic is produced by the petroleum industry and is commonly used in space applications. The system consists of two phases. Firstly, PET film is degraded using enzymes and then it is recycled using bacteria into a more valuable product used in the production of nylon. This invention was commended by TIME Magazine in 2023 as one of the top 200 inventions and was tested in the International Space Station for a month in 2022.

Media Lab is a laboratory within the Massachusetts Institute of Technology in Boston, which focuses on research projects combining design, multimedia and technology.

18 Spartan Space (FR)

EUROHAB, 2021 Inflatable lunar habitat, actual dimensions: $\emptyset 4 \text{m} \times \text{H} 2 \text{m}$

The aim of the ARTEMIS programme, initiated by NASA at the request of President Trump in 2019, is to restart crewed Moon missions — the last one dating back to 1972. Unlike the Apollo missions, ARTEMIS would head for the South Pole of the Moon due to the presence of water ice there.

Apart from the landing sites, the area available for astronaut exploration, either alone or in a rover, is only a few kilometres. This is why the idea emerged of developing base camps such as *EUROHAB*. This inflatable habitat acts as an extension to scientific exploration or a refuge in the event of a catastrophe. *EUROHAB* is the result of research carried out by Spartan Space, a French start-up established in 2021 which specialises in habitats to be used in space and on the ocean floor.

19 Liquifer (AT)

SHEE, 2015

Self-deploying habitat for extreme environments, actual dimensions: $5,75 \times 6,4 \times 2,8$ m

SHEE is a functional habitat made from deployable, rigid and robotic components. Each SHEE module can accommodate a crew of two people for a two-week mission. It includes two crew cabins, kitchen, sanitary installations, workspace and laboratory. SHEE is equipped with a system to check and monitor the environment and a closed storage space for rubbish and waste water.

SHEE isn't designed for use in space. It's an Earth-based simulator that provides an environment where crew can prepare for long voyages to the Moon or Mars. Based in Vienna, Liquifer is a transdisciplinary group of experts dedicated to researching and developing products for applications in space and on Earth. 20 AMOS (BE)

Réseau de diffraction, 2023 Optical instrument for observing the Earth

The Réseau de diffraction (diffraction network) is an optical device developed using a unique method of diamond turning. Integrated into a camera on board a satellite, it can collect unprecedented amounts of rich data about areas on Earth observed by the camera, covering a wide range of wavelengths far superior to what the human eve can detect. Thanks in particular to the data captured in the infrared range, this optical technology can observe types of soil, material and vegetation on Earth and analyse their composition to aid our understanding of multiple environmental processes. Developed by AMOS - a leading Belgian company in space optics - this one-of-a-kind technology is integrated into many satellites used in Earth observation programmes, including the European Copernicus programme (CHIME).

21 Space Applications Services (BE)

LUVMI-X, 2019-2024 Complete mobility solution for lunar polar missions

LUVMI-X (Lunar Volatiles Mobile Instrumentation) is a rover designed for lunar observation. This robot-type instrument is mounted on wheels and can move independently or under remote control from Earth. *LUVMI-X* can climb up inclines of 30° and over obstacles 30 centimetres high. The lightweight design can handle payloads and transport them on the Moon. A payload refers to all equipment provided for the mission. The device includes on-board measuring instruments and cameras.

Established in 1987, Space Applications Services is a Belgian company that is involved in most crewed space missions undertaken by the European Space Agency (ESA) and NASA. 22 Latitude (FR)

Zéphyr, 2019–2024 Space launcher, actual dimensions: 17 metres high

Zéphyr is a lightweight launcher developed by Latitude, which consists of two levels and is fuelled by kerosene and oxygen. The *Zéphyr* launcher is targeting the nanosatellite market with a very low lifting capacity of up to 200 kg in low Earth orbit. The aim is to be able to launch small, low-cost satellites, with the first launch expected in 2025.

Latitude is a French start-up established in 2019 and based in Reims.

23 Amélie Bouvier (BE)

Quadrivium – LEO Melody, 2024 Interactive kinetic installation, wood, metal, musical instruments, raspberry pi, screen, electric cables

Produced during the Art et Astronomie residency in Namur, 2021

Production assistance: Jean-Yves Rousseaux

With the support of the Fédération Wallonie-Bruxelles

Presented by the Harlan Levey Projects Gallery in Brussels.

a combination of the four mathematical sciences: arithmetic, geometry, music and astronomy After being mesmerised by annotations on old astronomical photographic plates that resembled sheet music, Amélie Bouvier developed Quadrivium - a whole orchestra of instruments that transform images of the starry skies into sound. She was inspired by the work entitled Harmonice mundi (Harmonies of the world, 1619) by the astronomer Johannes Kepler, which uses the Quadrivium* to capture the divine music of the spheres using a solar system model based on geometric proportions and musical harmonics

The latest machine of this kind, LEO Melody, refers to the Low Earth Orbit area. Space observation in this zone is threatened by the growing proliferation of satellites and is a major governance challenge for citizens. Consisting of mechanised triggers, this Quadrivium brings the sound of these omnipresent imperceptible objects to life.

24 Aldoria (FR)

Multiple Telescopes Observation Station (MTOS)

Space photographs of B33 nebula and M45 star cluster, Exposed for 120 seconds, B33 viewed from satellite RASCOM A (NORAD 32387) and M45 from two upper levels of launcher (NORAD 23648 & 23322) **Alexis Rolin**

MTOS is a space surveillance system based on four synchronously rotating telescopes located on the same observation site. Their rotational speed is coordinated with the transit time of objects in the field of vision to ensure that all space objects are detected, even with altitudes of less than 300 km.

Each telescope has its own remote-controlled mount, which means that the four telescopes can also be controlled independently to track specific objects. The captured images enable Aldoria, a company based in Toulouse which specialises in space debris monitoring, to make predictions on the trajectory of the observed objects and manoeuvre recommendations.

25 Aerospacelab (BE)

Plateforme satellitaire polyvalente (**VSP**), 2018 Satellite system for Earth observation and communication missions

A satellite consists of two main components: a platform and a payload. With its innovative *Versatile Satellite Platform (VSP)*, Aerospacelab has created a platform with a standard module available in different formats to meet the specific needs of each satellite and its associated payload. The solution developed by this Belgian company also reduces costs using a comprehensive approach from technological development through to launch into orbit.

Aerospacelab is a Belgian company which specialises in designing, manufacturing and operating satellite systems. Established in 2018, the company is planning to open the thirdbiggest satellite manufacturing facility in the world. Eight satellites have been successfully launched since 2021.

26 Véronique Béland (FR)

En sortie, le scientifique de l'Espace: point sur la conception, 2023 Generative artwork, artificial neural network, computer program, drawing robot, paper, felt-tip pen, flight case

DESIGN AND PRODUCTION **Véronique Béland**

Computer Programming — Deep Learning **Léo Dubus**

MECHATRONIC DESIGN Quentin Deyna

In partnership with the Observatoire de l'Espace du CNES (French Space Agency Observatory) Using a corpus of graphic archives containing images of rockets, robots, probes and other vehicles that have been sent into space since the 1960s, Véronique Béland has designed and painstakingly trained an artificial neural network to create a machine than can draw its own rocket designs using a felt-tip pen on paper, thus enabling it to dream up a whole new breed of spacecraft.

With its surprising concepts and impossible inventions, this autonomous non-human life form uses its robotic hand to generate singularly imaginative designs in real time that disrupt our usual ways of understanding the world. Using automatic writing and traces of acquired knowledge, it propels our space archive into a new forwardlooking direction carried along by a new narrative, of which space science is only the starting point.

$\begin{array}{c} \textbf{27} \quad \begin{array}{c} \textbf{European Space Agency} \\ \text{(ESA)} \end{array} \end{array}$

Copernicus Sentinel-1, 2014

Earth observation satellite actual dimensions: $1.6 \times 2.6 \times 3.8 \text{ m} - 20 \text{ m}$ full width

The Sentinel-1 mission includes a constellation of two satellites in polar orbit functioning both day and night. Sentinel-1 is the first of five missions developed by the European Space Agency (ESA) as part of the Copernicus programme, with the first launch into orbit in 2014.

The aim of the programme is to provide comprehensive, up-to-date data to European countries, enabling them to monitor the environment.

On loan from the European Space Agency (ESA).

Capitaine futur and the Night Land

*

Dear visitors,

On a starry night with fair winds, I set up Capsulo, my vessel, as it bounds into propulsion mode to leave the Earth behind and embark on an adventure.

It takes me to the great expanses of the Night Land filled with the present, the future and what is to come, where dimensions merge and light is inconspicuous, where landscapes play with proportions and laws of gravity, where energy flourishes and open-ended horizons conceal secret perspectives.

Moving warily or at the speed of light, follow me beyond the cloud frontier towards mesmerising depths. Let's open our eyes to these shimmering worlds. They could easily be mistaken for mirror fragments held up to our obsolescent existence, reflecting the future as we reach out to them.

Capitaine futur







Kongo Astronauts

Michel Ekeba et Eléonore Hellio (COG, FR)

Geo.Scan.Bordeaux Boundaries, Spacewalker, 2023 Multimedia – electronic circuits, fabric, wire, found objects, and white spray paint This spacewalker is in a transitional post-perfomance state, and will be renewed for its next public appearance.

From cosmic radiation exposure in the universe to rising temperatures on Earth, how can we live in an ill-adapted space? Capitaine futur explores the Night Land using a suit designed for survival, comfort and elegance in the extraterrestrial environment. The suit takes its inspiration from the wonders of astronomical technology and the wisdom passed down through legends of the night.

> Using assembled electronic waste products, the decoration used by Kongo Astronauts takes us back to the 1960s, when African countries achieved independence and joined the United States and the Soviet Union in the space race. The suit with its thousands of fragments also bears witness to the fact that we all belong to the same existence, consisting of elementary atomic nucleii created deep within the stars and the lowest common denominators of life in our universe, from the far reaches of space to the fragile surface of the Earth.



Murmur Stellar, 2024 Interactive lumino kinetic journey, video projector, computer, LED strip

In the depths of interstellar silence, the stars maintain deep and intimate relationships with each other. And because intimacy is also something secret, this fabulous shell allows the user to whisper into the ear of the universe by transforming their voice into gas nebulas and light comets. Could it be that these sound waves trigger colossal events thousands of kilometres away, like the wingbeats of a butterfly?

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Murmur Stellar sits somewhere between the physical world and the imaginary cosmos, representing the Chevalvert collective's commitment to lumino-spatial research into sounds-signs of life. Since the first Arecibo radio message destined for extraterrestrial civilisation in 1974 and transmitted towards the Hercules Cluster, located 22,000 light years from the Earth, we have never stopped sending signals to space in the form of waves.



Sea of Tranquility, 2015 Sound and scent diorama, ceramic, fragrance, sonic landscape, lunar rover Fragrance created by Barnabé Fillion

There is a secret place where we can watch the Earth rise: the Sea of Tranquility on the Moon, where humanity left its first traces in 1969. With his feet firmly planted in the sand, Capitaine futur marvels at this extensive landscape and then, before leaving for the starry skies, takes a handful of this precious material that hints of silver, ozone, gunpowder, and clouds of mildew and honey.

> Inspired by the composition and colours of Moon dust described in NASA archives, the Unfold design duo has created a new raw material to form the reliefs on the large disc of the *Sea of Tranquility* installation, crossed by a rover following original conversations from the Apollo programme about the smell and appearance of the Moon's surface.

$\mathbf{+}$

Kyle McDonald & Jonas Jongejan (US/DAN)

Light Leaks, 2013

Immersive experience, luminous architecture, projected on mirror balls, video projectors, four-channel sound system, computer, camera

Space: the final frontier. The vast system of the Night Land goes far beyond our capacity to comprehend. It's here where the scale shifts and the minuscule combines with the immense. Only the white light from distant stars and galaxies ricochets, dances and hypnotises. Our view expands to the edges and the mind enters a meditative state...

> An enthusiast of free internet use and collaborative approaches, where the creative process is valued over definitive versions, Kyle McDonald produced Light Leaks by turning the rule book on its head. With help from creative coder Jonas Jongejan, he has made the impossible possible and attempted video projection on the chaotic surface of 80 mirror balls.



WARMTH, touching the solar surface, 2024 Sound and light installation, recycled glass panels, light, sound, electronics, code

In this land, there's no rest for our shining star, our master of day and night. The Sun makes its presence felt when it lets rip with temper-tantrum tempests, fiery lightning bolts and supersonic winds. Alongside this dazzling and unpredictable neighbour, essential for human, plant and animal life, the Earth must coexist and learn to understand it.

> To highlight how the Sun and Earth coexist, Pepa Ivanova brings together solar observational data with audio recordings of the Earth, creating a sonic, visual and sensory score in three dimensions. The Warmth installation encapsulates the vibrant surfaces of the Sun under glass and brings perception of its crimson heat to palpable life.



Lucien Bitaux (FR)

Nadir - Picture Elements Explorer, 2022 Kinetic installation, steel, stainless steel, motors, screens, photosensitive sensors

There are mineral connections between infinitely large and distant stars and the Earth-based minerals used in our computers, telephones and telescopes. In this frenetic era where we are considering transforming space into a mining resource for exploitation, these cosmic rocks would like us to leave them in peace to continue nourishing our dreams.

Produced by Le Fresnoy – Studio National des Arts Contemporains

Partners:

• EINDHOVEN UNIVERSITY OF TECHNOLOGY, Dept. of Chemical Engineering and Chemistry SFD Lab. Stimuli-responsive Functional Materials & Devices Group, Michael Debije en Jeroen Sol • ÉCOLE CENTRALE DE LILLE,

Didier Burgnies

Using sensors and lightsensitive surfaces, the Nadir mechanical instrument invented by Lucien Bitaux meticulously cleaves silicon rocks extracted from the Earth and reduces them to dust to reveal their primitive celestial flesh while the process is broadcast on screen to make the images available on a micro and macro scale to the human eye. Stellar Scape is a **KIKK** production

In collaboration with the University of Namur

Curation JOS AUZENDE & MARIE DU CHASTEL Le Pavillon Esplanade de la Citadelle Route Merveilleuse, 65 5000 Namur

www.le-pavillon.be

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