

the political laboratory of European post-rescue culture. Again, issues of monumentality, historicity, data landscape, re-emerge in the world-inprogress of concealed facts. Each of these connected levels addresses a facet of the S+T+ARTS collaborative ecosystem without exhausting it. Modularity will allow a number of potential iterations, additions, and variations of the exhibition farther on, while central issues already appear in the project's iteration at Auditorium Biagi in Bologna. Additional sections are likely to emerge in future iterations of this curatorial endeavour, in order to shed light on other aspects of S+T+ARTS as a collaborative ecosystem.

+ Refik Anadol b. 1985 Istanbul, Turkey Lives and works in Los Angeles.

The media artist and director, Refik Anadol is recognized worldwide among the most important practitioners working with machine intelligence and parametric data sculpture today. He is the recipient of a number of awards, including Microsoft Research's Best Vision Award, German Design Award, UCLA Art+Architecture Moss Award, University of California Institute for Research in the Arts Award, SEGD Global Design Awards and Google's Art and Machine Intelligence Artist Residency Award. His site-specific audio/ visual performances have been presented at Walt Disney Concert Hall, Hammer Museum, International Digital Arts Biennial Montreal, ZKM I Center for Art and New Media in Karlsruhe, Ars Electronica Festival in Linz, l'Usine in Genève, among many others. Melting Memories is the title of a series of artworks realized by Refik Anadol in collaboration with the Neuroscape Laboratory at the University of California, a neuroscience center specialized in applying cutting-edge technology to study and improve brain functions. Data are collected through electroencephalography (EEG), and processed by the artist with custom made algorithms to create a visual rendition of the brain activities over time. Melting Memories intends to pose questions about the materiality of memories, and cognitive decay.

Félicie d'Estienne d'Orves b. 1979 Athens, Greece Lives and works in Paris

Félicie d'Estienne d'Orves is interested in the optical and acoustic sciences, as well as in astrophysics and the sciences of perception and cognition. Her immersive installations use a phenomenological approach to reality, they underscore the perception of time as a continuum. She works regularly with astrophysicists and planetary scientists, especially Fabio Acero at the AIM laboratory (CEA/Saclay), who specializes in supernova and high energies. Her work has been shown at the Centre Pompidou, the Nuit Blanche in Paris, the Sonic Acts in Amsterdam, the Watermans Arts Center in London, the Elektra Festival - BIAN in Montreal, the Maison des Arts of Créteil, the Nemo International Biennial of Digital Arts in Paris, the OCAT in Shanghai, the ICAS in Dresden, and the Aram Art Museum in Goyang. Martian Sun Series (2019) is an invitation to contemplate an extraterrestrial horizon, a distant landscape, located thousands of millions of kilometers away. The reserach is part of a wider investigation conducted by the artist at LMD Laboratoire de Météorologie Dynamique (CNRS) in Paris. Depicting the topography of major sites on the planet Mars, the motorized light reproduces light intensity and the height of the sun on the horizon in real time at each of the sites based on prediction from the LMD Mars Climate Database Project.

+ Evelina Domnitch and Dmitry Gelfand b. 1972, Minsk, Belarus + b.1974, St. Petersburg, Russia Live and work in The Hague.

Evelina Domnitch and Dmitry Gelfand create sensory immersion environments that merge physics, chemistry and computer science with uncanny philosophical practices. Having dismissed the use of recording and fixative media, their artworks exist as ever-transforming phenomena offered for observation. The duo's practice has emerged through unorthodox collaborations with pioneering research groups, including LIGO (Laser Interferometer Gravitational Wave Observatory), RvSQ (Rydberg Quantum Simulator) and the EU Quantum Flagship. They are recipients of the Witteveen+Bos Award, Meru Art*Science Award, Japan Media Arts Excellence Prize, and five Ars Electronica Honorary Mentions. About the Hilbert Hotel (2020), the artists write: "How can a fully occupied hotel of infinite scale continuously accommodate an infinite influx of new guests? David Hilbert was among a contingent of mathematicians, stretching back to Zeno, who pondered such questions of infinitesimal spatial granularity. Hilbert Hotel is a curvilinear ion trap that electrically levitates its myriad microscopic guests. These hollow glass microspheres float along startlingly square-shaped orbits, tracing the quadrupolar electric fields that keep them airborne."

+ Forensic Architecture (FA) is a research agency based at Goldsmiths, University of London. It undertakes advanced spatial and media investigations into cases of human rights violations, with and on behalf of communities affected by political violence, human rights organizations, international prosecutors, environmental justice groups, and media companies. Its work often involves open-source investigation, the construction of digital and physical models. 3D animations, virtual reality environments and cartographic platforms. Their work has been featured in international art and architecture exhibitions worldwide. The Murder of Pavlos Fyssas (2018) documents Forensic Architecture's research on a political crime that marked recent political history in Greece. Shortly after midnight on 18 September 2013, Pavlos Fyssas, a young

anti-fascist rapper was murdered in his home neighbourhood of Kerat-By the Code of Soil: (de)Compositions, by Molga and Scanner, echoes end users, creating functionally and emotionally appealing architecsini, Athens. Both the killer and others who participated in the attack the relentless activity of an accumulation of layers of natural soil inside tural design. For the exhibition NEAR + FUTURES + QUASI + WORLDS, were members of the neo-Nazi organisation Golden Dawn. Forensic Ara column-like box made of plexiglas and equipped with sensors. The S+T+ARTS partners with Kilowatt, a hybrid organization that pursues a piece is the result of the residency undertook by Molga at GROW Obserchitecture was commissioned by the family of Fyssas and their legal social and cultural mission through the creation of impact projects, civic representatives to reconstruct the events of the night from audio and vatory, a research project that aims at monitoring the environment on a engagement, communication, and educational programs. video material made available to the court. The video investigation, and planetary level. Working closely with Scanner, Molga devised a system the accompanying text report, was presented to the courtroom in Korywhere the earthworms living in the soil actively shape the latter's strucdallos, Athens, where the 'Golden Dawn trial' took place. ture and produce an infinitely moving soundscape.

+ So Kanno b. 1984, Japan Lives and work in Berlin.

Trained at the Musashino Art University, as well as, the Institute of Advanced Media Arts and Sciences (IAMAS) in Japan, So Kanno has developed an art practice that challenges, often with a touch of irony, some aspects related to technology today, such us the relation between signal and noise, error and glitch. His work has been the subject of multiple presentations including the Japan Media Art Festival Sukagawa in Fukushima, the Ars Electronica in Linz, the 4th Istanbul Design Biennial, the Grand Palais in Paris, the Nemo International Biennial of Digital Arts in Paris, at Fondation Vasarely, Aix-en-Provence and at the YCAM in Yamaguchi. He is the recipient of many prizes and special mentions such as the Japan Media Art, Ars Electronica, among the others. He is also lecturer at the Zokei University Media Design and the Polytechnic University both in Tokyo. Senseless Drawing Bot (2011-ongoing), made in collaboration with Takahiro Yamaguchi, is a self-propelling robot that produces a form of chaotic, abstract graffiti drawing using a double pendulum system. As the robot moves from side to side of the wall, its shaking arm activates a series of rhythmical, yet unpredictable paint strokes. A canvas resulting from a recent performance by this art-making machine is presented in the exhibition, alongside a video documenting its operations in different media art festivals. The operations of this painterly machine are not without a sense of dance, even a certain punkish flair.

Etsuko Yakushimaru is a Japanese singer, producer, composer, lyricist arranger, and visual artist. She is broadly active both in the pop indus-Egor Kraft + Julia Koerner b. Salzburg, Austria try, and the experimental music field, as solo artist or with her band. CAS_05 Julia Mamea, 2019. Crema marfil marble, polyamide, machine Lives and works between Vienna and Los Angeles. Sōtaisei Riron. Her approach is characterized by interdisciplinarity, she learning algorithms, 33 x 19 x 19 cm + CAS_12 Carvatid Portrait, 2019. Marble, polyamide, machine learning algorithms, 21 x 17 x 25.5 cm + Julia Koerner received her master's degrees in architecture from the created projects that involves satellite, biological data and biotechnol-University of Applied Arts in Vienna and the Architectural Association in ogy, song- generating robot powered by artificial intelligence. She has CAS_13 Augmented Hercules, 2019. Marble, polyamide, machine learning algorithms. 23 x 28 x 29 cm + Deep Portrait. 2019. 12-channel video London. She works at the convergence of architecture, product design, worked on numerous collaborative projects with renowned artist such and fashion design and she is internationally recognized for design as Ryuichi Sakamoto, Jeff Mills, Matthew Herbert, my bloody valentine, installation, 90 x 72,5 cm innovation in 3D-Printing. She is the founder of JK Design specializing Christian Fennesz, Thurston Moore, Cornelius, and Arto Lindsay. Her in digital design. Some of her most recent collaborations include Haute work has been presented in prestigious art events worldwide. Among Julia Koerner Couture Houses for Paris Fashion week and 3D printed costumes for them, the Mori Art Museum, Toyota Municipal Museum of Art, Yamaguchi SETAE JACKET, 2019. Digital renderings + SETAE JACKET, 2019. 3D Hollywood entertainment productions such as Marvel's Black Panther Center for Arts and Media, Ars Electronica Festival, Bozar Electronic printed by Stratasys Ltd. for the Chro-Morpho Collection Prototype. Polyjet technology on Fabric, 25 x 40 cm + DIGITAL VOGUE - Between in collaboration with Ruth Carter, which won an Oscar for Best Costume Arts Festival, 21st Century Museum of Contemporary Art, Kanazawa, Design. Museums and Institutions which have exhibited her work in-National Museum of Nature and Science, Tokyo. I'm Humanity (2018) is Synthetic and Organic Processes, 2020. 3D printed by Stratasys Ltd. clude the Metropolitan Museum of Art in New York, the Art Institute of the first song in human history to be released as a genetically-modified for Re-Fream Prototypes. Polyjet Technology on Fabric, 12 samples, 10 Chicago, the High Museum of Art in Atlanta, the Philadelphia Museum of microorganism alongside the CD and digital music formats. Yakushimax 10 cm + Documentation: Madagascar Sunset Moth specimen Art, the Palais des Beaux Arts in Brussels, Museum of Applied Arts MAK ru's work of "post-humanity music" used the nucleic acid sequence of Vienna, Ars Electronica in Linz, among others. Julia Koerner's design Kasia Molga and Robin Rimbaud aka Scanner Synechococcus, a type of cyanobacteria. The musical information was investigation focuses on digitally translating natural patterns into algo-By the Code of Soil: (de)Compositions, 2019. Transparent container converted into genetic code to create a long DNA sequence, which was rithms and advancing the digital workflow from 2D to 3D. The multicolorartificially composited and incorporated into the chromosomes of the acrylic and wood, various types of soil and sand, bespoke electronic ed wings of the Madagascan Sunset Butterfly are scanned and printed microorganism, which is known for his ability to continuously self-replicomponents, soundcard, speakers and earthworms, $50 \times 50 \times 185$ cm without any support material and directly on fabric in color. The result cate. Even if humanity as we know it becomes extinct, the organism will is a visually compelling spatial formation that express itself fully when Iris van Herpen in collaboration with Philip Beesley live on transmitting the music through its genetic code. the piece is worn by a living body. The Setae jacket (2019) is part of Magnetic Motion Moon Dress, 2015. Textile fibers, acrylic Digital Vogue, an ongoing project developed by Koerner in collaboration with the tech partners Stratasys, Profactor, Haratech, and FAT in Linz. Iris van Herpen in collaboration with Jolan van der Wiel Magnetic Motion Shoes, 2015. Textile fibers, acrylic

+ Kasia Molga b. Poland Lives and works in Margate

S+T+ARTS is an initiative of the European Commission under the Horizon 2020 Research and Innovation program. It was launched in 2015, following up on findings of previous activities funded by the European ALL WORKS COURTESY THE ARTISTS Commission such as ICT&Art 2012, FET-ART, ICT ART CONNECT 2013, and ICT ART CONNECT Study, whose results demonstrated the worldwide emergence of communities producing hybrid collaborations among science, technology and the arts. S+T+ARTS Prize awards the most pioneering results in the field of co-creativity and innovation at the crossings of science, technology and the arts: - Grand Prize, Artistic COLOPHON Exploration Awarded for artistic exploration and art works where an-+ FUTURES + QUASI + WORLDS held at Palácio Sinel de Cordes, Lisbon, propriation by the arts has a strong potential to influence or alter the use, deployment or perception of technology. - Grand Prize, Innovative from July 5th to August 27th. The exhibition is organised by Artshare -Collaboration Awarded for innovative collaboration between industry or Intelligence, Technology and Arts under the S+T+ARTS EU initiative and curated by Manuel Ciraugui in collaboration with Silvana Fiorese. technology and the arts that opens new pathways for innovation. The + Robin Rimbaud aka Scanner b. 1964, London S+T+ARTS Residencies program aims to support and fund artistic res-Graphic design by Álvaro Cánovas, Júlia Merino, and Alexandre Viladrich idencies that bring original artistic contributions to technology-based Lives and works in London projects. During each Residency, a Tech Partner collaborates with an x Eina Idea. Original typeface design was made after the fragmentation, Artist, leading to the creation of an original artwork, and the developdecomposition, permutation, and speculative redistribution of graphics ment of the innovative aspects of the tech research. A grant is awarded operating in the starts.eu website. This typographic development replito the Artist of each Residency as a contribution to their involvement cates aspects of the exhibition's core concept-imminence, unfinishedness, experimentation, accumulation, momentum, tectonic-understood in the residencies program and can also be supported by a Producer. also as constitutive elements to the spirit of perpetual research and S+T+ARTS Lighthouse Pilots support research seeking radically novel technology solutions to major challenges for industry and society, in cross-pollination fostered by S+T+ARTS close collaboration with artists. Re-FREAM enables co-creation by scientists and artists in urban environments by offering facilitation services, access to know-how and technologies as well as mentoring. It designs a sustainable, open innovation platform with researched technologies, patterns, concepts, learnings for further development of fashion of the future. The central objective of MindSpaces is to create the ARTSHARE S+T+ARTS tools and develop the solutions for adaptive and inclusive spaces that dynamically adapt to emotional, aesthetic, and societal responses of

Kasia Molga is a design fusionist working at the intersection of technology, arts, science and engineering. Through her installations, audiovisual performances or coded multimedia sculptures, she creates narratives about how emerging and ubiquitous technologies impact our understanding of the natural environment. She exhibited and presented internationally, most notably; Centre Pompidou in Paris, Tate Modern in London, V&A Museum in London, Ars Electronica in Linz, TRANSNAT-URAL in Amsterdam, Meta.Morf , ISEA in Istanbul, Translife Media Arts Triennial in Beijing, MIS in São Paulo, V2_ Institute for the Unstable Media in Rotterdam; and she is a recipient of such international awards as Wellcome Trust Award. Ars Electronica. Creative Industries. European N.I.C.E Award, RESHAPE, and LES RESPIRATIONS. Scanner's work traverses the experimental terrain between sound and space connecting a bewilderingly diverse array of genres. Since 1991 he has been intensely active in sonic art, producing concerts, installations and recordings, the albums Mass Observation, Delivery, and The Garden is Full of Metal hailed by critics as innovative and inspirational works of contemporary electronic music. To date, he has scored 65 dance productions, including the hit musical comedy Kirikou & Karaba Narnia, Qualia for the London Royal Ballet, and the world's first Virtual Reality ballet, Nightfall, for Dutch National Ballet. More unusual projects have included designing sound for the Philips Wake-Up Light. the re-opening of the Stedelijk Museum, Amsterdam, and the new Cisco telephone system used in many offices around the world. Committed to working with cutting edge practitioners he collaborated with Brvan Ferry, Wayne McGregor, Mike Kelley, Torres, Mi Michael Nyman, Steve Mc-Queen, Laurie Anderson and Hus sein Chalayan, amongst many others.

From July 5th through August 27th, 2022, the travelling exhibition NEAR + FUTURES + QUASI + WORLDS will present a selection of important artworks from twelve artists, thus surveying seven years of S+T+ARTS: an initiative of the European Commission to foster collaborations between art, science, and technology since 2015. Seeking integration of artistic practices with research and innovation, S+T+ARTS operates by means of open calls, residencies, collaboration projects, and awards. Through all its endeavours, S+T+ARTS strongly promotes transnational dialogue, diversity, and environmental awareness as core values in a time of geopolitical unrest and critical climate change. NEAR + FUTURES + QUASI + WORLDS aims to emphasize the vital role that collaboration in scientific, technological, and artistic domains can play in furthering contemporary investigation and integrative forms of cutting-edge artistic creation. The show will feature a selection of artworks, objects, and documents highlighting the manifold scope of S+T+ARTS actors, activities, and collaboration networks. While many works in the show originate in S+T+ARTS programs such as Residencies, Lighthouse Pilots, Re-FREAM, and MindSpaces, others account for the vitality and global scope of S+T+ARTS' annual Prizes.

Transcending punctual interaction, shared languages of experimentation emerge in common research environments. Every work in the show is a fragment of a newly organized system, a piece of a world-like sphere not fully formed or complete or fully real, but steadily emerging. By way of their visionary capacity and structural insight, these works place the viewer on the verge of reality and demonstrate the elasticity of limits. If the new is shaped by research and informed by experimentation, the selected projects readily approach what is or could be about to happen. They posit thresholds—unexpected expressions of what is to come. As capsules of an unfinished, truncated, propositional tomorrow, these works are an almost here. In the form of robotic sculptures, 3D prints, bas-reliefs, digital animations, film, light, and machine work, they make potentiality manifest and claim the conceptual space of what may be close to happening. NEAR + FUTURES + QUASI + WORLDS thus explores phenomena of reciprocal influence and cross-pollination between technology, science, and the arts, all at work in each of the selected projects, to open up new modalities for innovation and creation in the foundational spirit of S+T+ARTS.

Several thematic blocks structure the curatorial development of NEAR + FUTURES + QUASI + WORLDS, each of them functioning like a specific module that conceptually overlaps with the others and affords a multiplicity of readings for the whole. Through the notion of statuary, as a crucial concept beyond European art history and with many resonances beyond, NEAR + FUTURES + QUASI + WORLDS confronts classicism as it reappears, mutates, decomposes, and re-emerges in research-based art and collaborations with advanced technology today. The forms of statuary are not necessarily anthropomorphic or figurative, even though they may surround, expand, or replace the volume of generic human bodies. Rather, these forms seem to be the result of certain attitudes of material—uses of the pedestal, mutations of the torso, manneguin-like arrangements, abstract robotic dances, colourful synthetic protrusions. Since Antiquity, statues emblematize body qualities and highlight the dialectics between artifacts and living beings, representation, and flesh. So Kanno's Senseless Drawing Bot, Egor Kraft's Content Aware Studies, Iris van Herpen's Magnetic Motion couture collection, Julia Koerner's Digital Vogue research pushing toward an artificial fur or butterfly wing velvet... These works invite us to think at the intersection of historical time and multi-faceted, post-human thingness. They project new encodings of social memory, monumentality, corporeality, agency, and myth. Unexpected tensions between time, timelessness, technology, and bare construction also appear in radically abstract kinetic devices such as Evelina Domnich and Dimity Gelfand's Hilbert Hotel, Refik Anadol's Melting Memories, and Félicie d'Estienne d'Orves's Martian Sun Series. In their four-dimensionality, these art works describe the apparently rhythmic patterns that structure autonomous worlds we encounter in fragments. There is a ticking, sliding, cyclical otherness in each of these art works, where the machine is a landscape and the landscape a machine. Also, at work in these worlds in progress is the merging of micro and macro scales. Like probes of exploded geographies, they inevitably make us think of enigmatic snow globes. In By the Code of Soil: (de)Compositions, by Kasia Molga & Scanner, and I'm Humanity by Etsuko Yakushimaru, the living appears as a generative element in the artwork that permeates the world beyond. Not coincidentally, sound is a key aspect of both these projects- as a haunting manifestation of life's substrate as well as a translation of the world into genetic code. Meanwhile, sound fragments emerge in Forensic Architecture's The Murder of Pavlos Fyssas to reveal the disturbing evidence of a political crime in contemporary Greece, the birthplace of classicism and

+ Iris Van Herpen b. 1985, Wamel, The Netherlands Lives and works in Amsterdam

Iris van Herpen is a Dutch fashion designer who is internationally recognized for her pioneering use of 3D printing as a construction technique, as well as aesthetic principle. Since her first show in 2007, she has been preoccupied with inventing new forms and methods of sartorial expression by combining the most traditional and the most radical materials and garment manufacture methods into her unique vision. Her work has been featured in various museum exhibitions, including a major retrospective that toured the United States and Canada from 2015 to 2018. Van Herpen's creations have been exhibited at the Victoria & Albert Museum in London, the Cooper Hewitt Museum in New York, and the Palais de Tokyo in Paris, among others. In the Magnetic Motion collection (SS2015), Iris van Her pen explores the interplay of natural forces and digital technologies. The inspiration for this collection was a visit at the CERN's Large Hadron Collider, whose magnetic field exceeds that of Earth by twenty thousand times. The Ca Canadian architect Philip Beesley and the Dutch artist Jolan van der Wiel, both collaborated with Iris van Herpen in the completion of this project, which was awarded the STARTS Prize 2016 in the Artistic Research category.

+ Etsuko Yakushimaru b. 1987, Tokyo

Lives and works in Japan

ABOUT S+T+ARTS



EXHIBITION CHECKLIST

Refik Anadol

Melting Memories, 2018 + Melting Memories: Artistic Computation Workflow, 2018. HD Video, sound, dimensions variable

Félicie d'Estienne d'Orves

Martial Sun: Sol 24h39min 35s, Endeavour Crater (Opportunity, 2004), 2019 + Martial Sun: Sol 24h39min 35s, Chryse Planitia (Viking1,1976), 2019 + Martial Sun: Sol 24h39min 35s, Gusev Crater (Spirit, 2004-2010), 2019. Plaster low-relief, steel, motorized LED, electronics, 115 x 75 cm

Evelina Domnitch and Dmitry Gelfand

Hilbert Hotel, 2020. Glass microspheres, electrodes, glass cylinder, laser, ø 26 x 30 cm

Forensic Architecture

The Murder of Pavlos Fyssas, 2018. HD Video, color, sound, 38 min

So Kanno and Takahiro Yamaguchi

Drawing by Senseless Drawing Bot, 2022. Spray paint on canvas, 150 x 700 cm

Senseless Drawing Bot Video documentation, 2012, 2' 26"

Etsuko Yakushimaru

I'm Humanity, 2016. Set of 5 CDs, printed lyrics, video clip





