Art | Science at the JRC
fertile soils: (-0.30 to -2 m)
lower atmosphere: (0 to 50 m)
Troposphere: 10 km
Atmosphere: 100 km
weathering rocks: (-20 to hundreds meters)
continental crust: -30 to 65 km
mantle: -2900 km
Boundary (homogeneous)
The JRC SciArt Project
The SciArt project brings together scientists with artists and policy-makers to discuss matters of concern, not only to the JRC and the European Commission but also more widely to society. We broker, curate and communicate transdisciplinary exchanges and encounters around given topics of interest. We then produce and exhibit the result of such encounters in a venue of relevance, as a way to engage with the public, foment conversations with the citizen, and create cultural products of contemporary relevance. The SciArt project works from local to global and back, as well as across cultural, generational (from school to senior scientists) and disciplinary boundaries.

The Joint Research Centre (JRC) is the European Commission’s science and knowledge service which employs scientists to carry out research in order to provide independent scientific advice and support to EU policy, with independent scientific evidence throughout the whole policy cycle. The JRC has six sites in five EU countries (Brussels, Geel, Ispra, Karlsruhe, Petten, Seville). More information can be found at https://ec.europa.eu/jrc/en/.
What’s your dream? **FAIR** The Next Economy **FAIR** Market of Externalities **FAIR** HyperThinker #1 **FAIR** The Water we Eat **FAIR** A Particular Matter **FAIR** The Grand Scientific and Social Exhibition **FAIR** Radio Frankenstein **FAIR** La Fabbrica dei Terremoti **FAIR** Mickey Morph **FAIR** Sensorial Skin for an Intelligent Guerilla Beehive **FAIR** The Sebastiano Experience **FAIR** Oscil-lum **FAIR** Double Ocean **FAIR** Memory Vapour **FAIR** Secret Sound Stories **FAIR** What do you fear? **FAIR** What do you dream? **FAIR** How do you distribute? **FAIR** What are you eating? **FAIR** How much water do you eat? **FAIR** Do you think borders will protect you? **FAIR** Where shall we meet? **FAIR** What do you repair? **FAIR** Is Nature fair? **FAIR** Who do you hurt? **FAIR** What do you cure? **FAIR** What can we do? **FAIR** What more will we disrupt? **FAIR** Where will we stop? **FAIR** Who will remember? **FAIR** What story do you tell?
Weather Prediction by Numerical Process

Conversation on Time

Nature of Knowledge – The Uncertain Structure

A Portrait of the AI as a Young Cyber Oracle

Landslide (Resilience in Unstable Times)

horaica

Quantum Oscillographs

To Breathe

Retinitis Pigmentosa

B-scope, C-index

HA

Resonance Space(s): An Artistic-Scientific Research Project

The Tannhäuser Gate

between systems and selves

Life Is Motion

“Why Am I Seeing This?”

Forever-do

DataWe

D.Pulex Black Box

My Data + Me: una storia d’amore

The Sound of Waves

GAIA 5.0

Datami: A Holographic Image – Ambience

(In)Definite!

Resonances III datami 2018-19, Works
Resonances
Resonances is the flagship initiative of the SciArt project. We foster and promote Resonances between art, science and policy. A twoday cycle, driven by a theme chosen from the EC/JRC work programme, brings together scientists, artists and policymakers. These meet for the first time at a Summer School, where they have the time to get to know each other and discuss topics of common interest. When inspired by these meetings, artists can propose installations in close collaboration with scientists and policymakers. If selected, these proposals are further elaborated with the scientists during residency periods, then produced and showcased. First at the JRC Ispra site by the Lago Maggiore in Italy; then in a major European venue.

Resonances I was an experiment, a test, a pilot, which took place during the EXPO2015. It treated Food, but not only. The first fullyfledged edition of Resonances, Resonances II, was held in 20162017, on the EC policy theme Fairness, declined as ‘Fair/Fear’. During the 2016 summer school, amongst the brightest and best of the European SciArt world traveled to the JRC to kick-start the project. Then, from 13 to 15 September 2017, a wide variety of artworks made in close collaboration with JRC scientists (14 installations and 2 performances) were showcased in a festival in Ispra. The show later traveled to the National Museum for Science and Technology Leonardo da Vinci in Milan, Italy. More than 40,000 visitors to the museum enjoyed the JRC artworks.

Resonances III took place in 2018-19. The subject was Big Data, developed as a Datami: a data tatami, a place of rest and repose throughout the onslaught of information. The concept arose from a 12-week brainstorm with our Big Data scientists that fed into a resounding Summer School, which gave rise to many art/science collaborations (21 installations, 2 VR and 2 performances). The results were showcased at a Festival at the JRC in Ispra, and later travelled to the Bozar Centre for the Fine Arts in Brussels.

Resonances IV will focus on NaturArchy: Towards A Natural Contract. Going beyond Rousseau’s social contract, NaturArchy represents a wider, and more urgent, contract with Nature, giving her juridical personality in order to defend herself against the onslaught of human development. Central to it will be topics of Deep Ecology, Sustainability, Nature Decolonised. The theme will be developed with scientists, policymakers and artists in support of the Commission’s Next Gen EU and in particular, the European Green Deal: a much-needed instrument against global warming. Intersecting science and law, reason and judgment, art and policy, Resonances IV wants to re-imagine the western relation of human and non-human, in an attempt to ensure juridical personality to the universe’s many wonders, be it stardust or DNA.
Artists in Resonances
At the end of the Resonances III (2018-19) cycle, scientists engaged in the process were given the opportunity to extend collaboration with their counterpart artists. The artists’ residency encourages dialogue and experimentation. There is no requirement to come up with a final product; instead, the SciArt project nurtures the ideas sparking from the prolonged work of artists and scientists.

Parola di Donna
In 2021 the JRC SciArt project began facilitating a grass-root initiative on theatre and science called Parola di Donna. This initiative was thought of as a way for female researchers at the JRC to speak up (parola) and occupy space, exploring the socio-cultural and political dimensions of women (donna) in science, specifically science for policy. Renowned playwright Angela Dematté - recipient of multiple awards, including Italy’s most important acknowledgement for theatre the premio UBU - and theatre director Simona Gonella conducted workshops with a group of 15 JRC scientists from a variety of backgrounds and disciplines. They instructed the scientists in the world of theatre, and helped them develop a play, which acquired the title “Feeling Science: a Theatre Experiment”. 1.5 years of deep crossdisciplinary work at the intersections of artistic inquiry and science for policy, culminated with a performance on Friday 11th of March 2022, at Teatro Santucci, Varese (IT). The Feeling Science protagonists and show will return on October 21st in Varese, as part of the series “Parola di Donna Varese”.

“We live in fragile times... The ground, the fundamentals on which we stand, is changing and humanity cannot continue to survive as a community by taking for granted its unlimited control and possession of Planet Earth.”
Derrick de Kerckhove (Series Curator)

SciArt talks – Changing the Ground
To effectively change the ground we cannot rely solely on one discipline - be it science, art or technology. We need a more integrated and holistic approach to tackle today’s societal problems. Ranging from social quantum science to posthumanism, from science communication to the role of cultural institutions in framing societal concerns, from metacities (not ‘metaverse’) to learning to live in complexity. From the role of imagination and education to reconfiguring modes of understanding, this series of talks - at times controversial, always thought-provoking - questions existing paradigms with the hope to instil a new sense of interdependence between everybody with everything.
The EASI - European Art|Science Initiative
A bottom-up initiative, inspired by JRC SciArt artist alumni who looked to contribute to the New European Bauhaus movement, and the European Green Deal – as encouraged by President von der Leyen - EASI looks to be a space for interaction, innovation, experimentation and inclusiveness, giving it truly European dimensions. This would allow different DGs (DG EAC, DG RTD, DG CNECT and DG JRC) with existing art-science initiatives, to collaborate and converse virtually – constrained but also enabled by the current Covid situation. Through EASI they would be able to experiment with new forms of citizen engagement, while providing an ablative, that is active, dynamic, participatory platform for artists, policymakers and citizens. This is a challenge we know many artists would love to embrace.

“We as a global civilization must bridge science with art, both with policy and society in the very short term, to heal a rift between human and nature that has already cost us and the planet dearly.”

Bruno Latour

Art | Science, and the New European Bauhaus
The SciArt project is facilitating action and discourse around the relevance of art-science and arts-based research for the New European Bauhaus. The transdisciplinary practices, communities and modes of engaging/creating championed by SciArt can contribute to the New European Bauhaus and the development of a more inclusive, sustainable, beautiful Europe. SciArt practitioners are ready not only to redesign buildings, urban spaces, industrial processes and materials, but also to imagine and design possible futures and the processes needed to get us there. With a strong capacity of devising strategies for citizen engagement, knowledge exchange, empathy, meaning and value, SciArt can help to find practical and theoretical possibilities for the New European Bauhaus. This programme fosters reflection on placing the EU Green Deal squarely in front of the European polis, thus contributing to systemic change and a renewed pedagogy for a transformative literacy one of the cardinal strengths of the historical Bauhaus.
The scientists are in terror
and the European mind stops
Wyndham Lewis chose blindness
rather than have his mind stop.
Night under wind mid garofani,
the petals are almost still
Mozart, Linnaeus, Sulmona,
When one’s friends hate each other
how can there be peace in the world?
Their asperities diverted me in my green time.
A blown husk that is finished

but the light sings eternal
a pale flare over marshes
where the salt hay whispers to tide’s change
Time, space,
neither life nor death is the answer.
And of man seeking good,
doing evil.
In meiner Heimat
where the dead walked
and the living were made of cardboard.

Ezra Pound. Canto CXV, 1962
Frame of References

sciart
society
The JRC SciArt project actively investigates the overlapping fields where art and science operate, their similarities of method and commonalities of approach. The assumption is that after centuries of estrangement, both bodies of knowledge are converging again in a new constitution/constituent of knowledge, freed from the limits inflicted by arbitrary disciplinary codes. This is executed as a JRC project, linking art as well as science to policymaking and hence, to society. It follows a strict DIY philosophy, based on the understanding that you have to experience the rapprochement between art and science first-hand if you want to understand why and how they are converging again after centuries of estrangement, responding to a crisis of representation that has touched art since approximately two centuries, and science for decades. Every two years, scientists, artists and policymakers meet, explore, dialogue, find out, and, sometimes, contradistinguish. Yet they discover: similarities of intent, method, scope, in their differences of approach. They experiment with methods of questioning and investigation, with concepts of representation of reality. If everything goes well, they connect and develop shared projects. Then, the room fizzes with energy, the artists are inspired by science to develop proposals for novel works of art nurtured by science that in its turn is inspired by art and policy. The resulting art works are produced the year after in a common shared work which we call opera, referring to the Latin plural of opus.

Art but also science, knowledge but also emotion, a common endeavour of intents that seek to answer the challenges society must confront. The word opera, a singular plural that is also multiply singular, indicates the pluralities of knowledge coming together, the end of the individual work of art, the recognition that if we are to confront our great concerns we must join forces, overcoming limits of habit, institution and tradition, in a fully unfolded democracy of disciplines. The scope is: not to produce a work of art, not to produce a work of science, but to arrive at the core of the opera (Giorgio Agamben, 2017, Creazione e Anarchia, Neri Pozza) real SciArt. Art blended with science, science regaining its capacity for imagination, something it lost in the crisis – not of representation but of results, which has touched all disciplines and domains in the last decades. Bridge, island of negentropy, crucible of innovation, agorà of discussion, the Resonances Festival and Exhibition is an experiment in dialogue, public discussion, rapprochement of knowledge and society, an active sign of union in a union of equals, an exercise in and invitation to a true democracy of disciplines.
Credits

Critical Zone, A. Arénes ................................. 1
Speed dating at Resonances III, 2018-19, JRC .......... 5
Resonances II Fair/Fear 2016-17, JRC .................. 6
Resonances III datami 2018-19, JRC .................... 8
Silicon Synapse, JRC Ispra, Datami Exhibition, 2019, A. J. Burns ............. 10
The Grand Scientific and Social Exhibition, MuST,
Fair/Fear Exhibition, 2017, L. Montanini ............... 14
A Particular Matter, JRC Ispra, Fair/Fear Exhibition, 2017,
A. Tondeur/R. van Dingenen/J.-P. Putaud .................. 18

Resonance Space(s), JRC Ispra, Datami Exhibition, 2019,
A. Peterhaensel/D. Tirelli/J. Thielen-del Pozo/T. Petrioliagkis ............ 22/23
Radio Frankenstein, JRC Ispra, Fair/Fear Exhibition, 2017,
M. Zohner/N. Dewandre/P. Rosa .......................... 24
D.Pulex Black box, JRC Ispra, Datami Exhibition, 2019,
N. Zenovich/M. Petrillo/L. Gribaldo ........................ 28
Passage du Nord Ouest, created for Resonances II, 2017, S. Lindner .... 30
The Grand Scientific and Social Exhibition, MuST,
Fair/Fear Exhibition, 2017, L. Montanini/D. Ghio ........... 32
Atlas der Diatomaceenkunde, A. Schmidt, 1890 .............. 34
I have been sailing these waters for thirty years. They are almost deserted, forgotten, as if forbidden.

Two cultures are juxtaposed, two groups, two communities speak two different languages. Those who were trained in science from their youth are accustomed to exclude from their thought, from their life, from their common actions what may resemble history and the arts, works of language, works of time. Uncultivated men of learning, they are trained to forget men, their relationships, their sorrows, their mortality. Those who were trained in literature from their youth are thrown into what we agreed to call the human sciences, where they lose the world forever: works without trees or sea, without cloud or earth, except in dreams or dictionaries. Cultivated ignoramuses, they devote themselves to the squabbles without object, they have never known but stakes, fetishes or merchandise. I am afraid that these two groups are fighting for possessions long since swept away by a third, a parasite, ignorant and uncultivated at the same time, who gives them orders and who administers them, who enjoys their division and nourishes it!
