

Explore Gaia
GDIF 2020



Gaia is a touring artwork by Bristol based artist [Luke Jerram](#).

Luke is known globally for his modern arts practice and large scale public artworks.



Past work includes:

‘Museum of the Moon’



‘Park and Slide’ (the big water slide he installed down Park street in Bristol),



and the street pianos art project ‘Play Me I’m Yours’.

Find out more:
www.lukejerram.com



At GDIF, *Gaia*, is exhibited in The Painted Hall in The Old Royal Naval College.

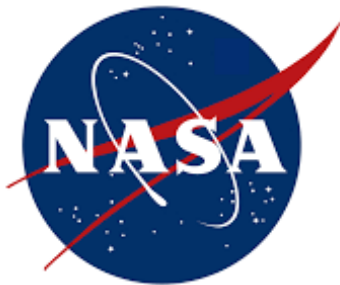
The Painted Hall is 'A Baroque masterpiece known as Britain's 'Sistine Chapel''

It took 19 years to paint and was completed in 1726 by Sir James Thornhill.



In Greek Mythology Gaia is the personification of the Earth.

She is Earth's Mother and carer.



Measuring seven metres in diameter, *Gaia* features 120dpi detailed NASA imagery of the Earth's surface.

The artwork provides the opportunity to see our planet on this scale, floating in three-dimensions.



The installation aims to create a sense of the *Overview Effect*, which was first described by author Frank White in 1987.



Common experiences for astronauts are:

- Feeling awe for our planet
- Understanding how we are all connected
- Sense of responsibility to care for the environment.



Who wrote the Music?

BAFTA and Ivor Novello award winning Composer **Dan Jones**.



The surround-sound music is 30 minutes long. There are voices, sounds and music to provide different feelings in the space. The full transcript is available at: festival.org/digital-access.



What is the Scale of this artwork?

The artwork is 1.8 million times smaller than the real Earth with each centimetre of the internally lit sculpture describing 18km of the Earth's surface. By standing 211m away from the artwork, the public will be able to see the Earth as it appears from the moon.

The Earth here is 7m in diameter. If the Sun were made to the same scale it would be 2820m in diameter!



Why was this artwork made?

For our entire human existence we have been gazing up at the moon and projecting all our hopes, dreams and wishes up there.

Whereas for the Earth, the first time humankind got to see our planet in its entirety as a blue marble floating in space was in 1972 with NASA's Apollo 17 mission. At this moment, our perception and understanding of our planet changed forever. Hanging in the black emptiness of space the Earth seems isolated, a precious and fragile island of life.



From a distance, the Earth is just a pale blue dot.



Is there an Environmental Message?

"I hope visitors to Gaia get to see the Earth as if from space; an incredibly beautiful and precious place. An ecosystem we urgently need to look after – our only home.



Halfway through the Earth's six mass extinction, we urgently need to wake up, and change our behavior.

We need to quickly make urgent changes to society, to prevent runaway Climate Change."
says Luke Jerram, Artist.



Where did the imagery come from to make this artwork?

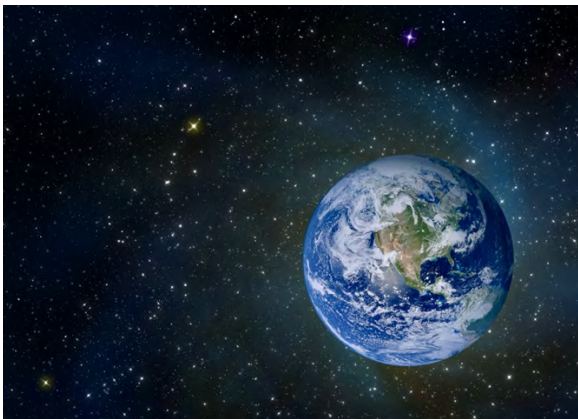
The satellite imagery for the artwork has been compiled from Visible Earth series, NASA.
visibleearth.nasa.gov



What is 'the overview effect'?

The overview effect is a change in understanding of the earth. We shift in our awareness of Earth, similar to the astronauts on a spaceflight, looking at the Earth from orbit of the moon.

It is the reality of the Earth in space, which is immediately understood to be a tiny, fragile ball of life, "hanging in the void", shielded and nourished by a paper-thin atmosphere.



From space, national boundaries vanish, the conflicts that divide people become less important, and the need to create a planetary society with the united will to protect this "pale blue dot" becomes both obvious and important.



The term and concept were made in 1987 by Frank White, who explored the theme in his book *The Overview Effect – Space Exploration and Human Evolution* (Houghton-Mifflin, 1987), (AIAA, 1998).



What is Earthrise?

Earthrise is a photograph of Earth and parts of the Moon's surface that was taken from lunar orbit by astronaut [Bill Anders](#) in 1968, during the [Apollo 8](#) mission. Nature photographer [Galen Rowell](#) declared it "the most influential environmental photograph ever taken".

When it comes to humanity's first true grasp of the beauty, fragility and loneliness of our world, however, we know the precise instant. It was on December 24, 1968, exactly 75 hours, 48 minutes and 41 seconds after the Apollo 8 spacecraft lifted off from Cape Canaveral en route to becoming the first manned mission to orbit the moon. Astronauts Frank Borman, Jim Lovell and Bill Anders entered lunar orbit on Christmas



Eve of what had been a bloody, war-torn year for America.

At the beginning of the fourth of 10 orbits, their spacecraft was emerging from the far side of the moon when a view of the blue-white planet filled one of the hatch windows. "Oh, my God! Look at that picture over there! Here's the Earth coming up. Wow, is that pretty!" Anders exclaimed. He snapped a picture—in black and white. Lovell scrambled to find a color canister. "Well, I think we missed it," Anders said. Lovell looked through windows three and four. "Hey, I got it right here!" he exclaimed.

A weightless Anders shot to where Lovell was floating and fired his Hasselblad. "You got it?" Lovell asked. "Yep," Anders answered.

The image—our first full-colour view of our planet from off of it—helped to launch the environmental movement. And, just as important, it helped human beings recognise that in a cold and punishing cosmos, we've got it pretty good.



What is the Blue Marble?

The Blue Marble is an image of planet Earth taken on December 7, 1972, by the crew of the Apollo 17 spacecraft at a distance of about 29,000 kilometers (18,000 miles) from the surface.

It is one of the most reproduced images in human history. Earth is revealed as both a vast planet home to billions of creatures and a beautiful orb capable of fitting into the pocket of the universe.

The image with the official NASA designation AS17-148-2272 reproduces the view of the Earth as seen by the Apollo crew traveling toward the Moon.

Apollo 17 was the last manned lunar mission. No human since has been far enough from Earth to photograph a whole-Earth image such as The Blue Marble, but whole-Earth images have been taken by many unmanned spacecraft missions.

The name has also been applied by NASA to a 2012 series of image data sets covering the entire globe at relatively high resolution.



What is Gaia?

In Greek mythology, Gaia also spelled Gaea, is the personification of the Earth and one of the Greek primordial deities. Gaia is the ancestral mother of all life: the primal Mother Earth goddess.

The mythological name was revived in 1979 by **James Lovelock**, in *Gaia: A New Look at Life on Earth*.



The Gaia hypothesis proposes that living organisms and inorganic material are part of a dynamical system that shapes the Earth's biosphere, and maintains the Earth as a fit environment for life.



However the hypothesis is scientifically flawed. The vast majority of scientists believe the hypothesis is not consistent with modern scientific evidence and understanding and should therefore be rejected.



Gaia at GDIF

Gaia is exhibited in the beautiful Painted Hall.

Access:

The venue has wheelchair access to the main hall.

There are spaces to lie down and sit.

You are welcome to move around *Gaia* and take photos and videos.

There is an Audio Description, BSL translation of the key speech by David Attenborough and large print copy of the text.

You can find this at:

[Festival.org/digital-access](https://festival.org/digital-access)

For more information:

<https://festival.org/whats-on/gdif-gaia/>