





## PRESS RELEASE

The exhibition will be open until September 7, 2025, on the fourth floor of the Espacio Fundación Telefónica.

## THE IMMERSIVE EXHIBITION 'ECHOES OF THE OCEAN' COMBINES ART, SCIENCE, AND TECHNOLOGY TO REFLECT ON THE HUMAN RELATIONSHIP WITH MARINE ECOSYSTEMS

- Echoes of the Ocean offers an immersive experience that allows us to live firsthand the vital importance of sound for marine inhabitants, a fact only discovered in the past two decades thanks to technological advancements.
- The exhibition is the result of a creative dialogue between the art of the British collective Marshmallow Laser Feast and the scientific research of the Bioacoustic Applications Laboratory of the Universitat Politècnica de Catalunya, focusing on the perception of reality by cetaceans.
- Seeing Echoes in the Mind of the Whale, the central piece of the exhibition by the digital arts collective Marshmallow Laser Feast, is a large immersive audiovisual installation made up of twelve screens that brings us closer to how cetaceans perceive reality through listening.

Madrid, February 11, 2025. At the crossroads between the climate crisis and the emergence of a new digital order with the potential to expand knowledge through technology, *Echoes of the Ocean* presents a set of installations where experiential art, marine ecology, and the frontiers of bioacoustics intertwine to propose an experience focused on the sustainability of marine ecosystems and highlight the vital importance of sound for marine inhabitants. The exhibition space becomes a massive listening device inviting us to connect emotionally and empathetically with other living beings on the planet.

The *Echoes of the Ocean* exhibition, curated by José Luis de Vicente, establishes a creative dialogue between the artistic collective **Marshmallow** Laser Feast and scientists, researchers, and experts from various fields, including the **Bioacoustic Applications Laboratory of the Universitat** 

Politècnica de Catalunya, natural history writer and filmmaker Tom Mustill, glass artisans, and acoustic specialists.

Today we know that sound plays a fundamental role in the relationships between different forms of marine life. In the past 20 years, acoustic ecology has undergone a revolution thanks to the emergence of digital tools, from drones and satellite photography to networks of underwater microphones and artificial intelligence. As a result of this research, we are now aware of the threat posed by human activities, which generate large amounts of noise that interfere with marine life.

The first of Marshmallow Laser Feast's sound installations, **Meditation Room**, is a prelude that prepares visitors for the multisensory experience they will immerse themselves in throughout the exhibition. Guided by the sounds and vibrations of bottlenose dolphins, humpback whales, sperm whales, and gray whales, visitors are led through a meditative journey that invites them to attune their awareness and breathing to the rhythms of these oceanic beings, fostering a sense of shared existence.

After this initial immersion, visitors enter the central piece of the exhibition, Seeing Echoes in the Mind of the Whale, an immersive audiovisual installation comprising twelve screens, co-produced with the Museu del Disseny de Barcelona. Created by Marshmallow Laser Feast, the piece explores how marine species perceive reality through their senses. The installation depicts the progressive movement of cetaceans from the surface to the ocean depths, integrating Al-generated imagery and real sound recordings of marine species from various parts of the planet. Some of these sounds come from recordings by the Bioacoustic Applications Laboratory at the Universitat Politècnica de Catalunya, led for 20 years by marine biologist Michel André, an entity that studies ocean acoustic pollution and its impact on marine species, including whales, sperm whales, and other cetaceans. Other scientists and researchers, including natural history writer and filmmaker Tom Mustill, have also collaborated on the piece.

The third new creation by Marshmallow Laser Feast, **Temple of Plankton**, sensorially complements the previous two pieces. This sculptural, sound, and light installation recreates the vertical migration of countless tiny organisms that make up plankton. Two hundred blown-glass pieces evoke their rhythmic journeys from the depths to the ocean's surface, sustaining marine life and producing half of the Earth's atmospheric oxygen.

The immersive experience of these three installations is completed with two rooms showcasing a selection of materials from scientific research on marine species. In the first room, **The Science of Listening**, visitors can learn about the tools used by the Bioacoustic Applications Laboratory at the Universitat Politècnica de Catalunya to capture underwater sounds. Alongside two hydrophone buoys—large underwater microphones distributed across the world's oceans designed to listen to and analyze underwater sounds—there are six stations where visitors can access real recordings of bearded seals, humpback whales, dolphins, and sperm whales.

As an epilogue, the last room of the exhibition, **Stories of the Deep Sound**, compiles knowledge and the history of bioacoustics. The geostrategic military interests of the Cold War marked the beginning of underwater recordings, which soon encountered the interference of cetacean voices. This discovery opened up a world of sounds whose data quickly became accessible to oceanographers and scientists. Since then, technology has played a crucial role in the study of the marine soundscape.

In the 21st century, satellites, drones, and artificial intelligence have made it possible to observe whale movements from space, record their songs underwater, and develop new strategies to protect these cetaceans in an increasingly noisy and polluted ocean. All these discoveries and advances concerning the marine soundscape have occurred at the precise moment when human actions have begun to degrade and threaten it due to the noise we introduce into the ocean, which significantly affects the lives of cetaceans. The oceans are the vital support of our planet, constituting the world's largest ecosystem, hosting almost a million known species, and presenting an enormous scientific potential yet to be explored.

This situation prompts us to rethink our responsibility toward the environment and urges us to protect and preserve the balance between humans and the other species living on the planet. Only through empathy and harmonious coexistence with the natural environment can we ensure a sustainable future for generations to come.

## **Parallel Activities**

The *Echoes of the Ocean* exhibition is complemented by a program of parallel activities for school, family, and general audiences. For information on free guided visits, please check the website. Additionally, all exhibitions at Espacio Fundación Telefónica include a series of support resources for visitors: the exhibition guide, which also features an easy-read version, both available for download at the exhibition venue and at <a href="https://espacio.fundaciontelefonica.com/descargas/">https://espacio.fundaciontelefonica.com/descargas/</a>.

There is also an audio guide for the exhibition, available in Spanish and English, accessible from any mobile device with an internet connection.

More information about parallel programming, resources, and activity reservations can be found at https://espacio.fundaciontelefonica.com/en/evento/echoes-of-theocean/