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Contemporary Arts Practice and Outer Space: A Multi-Disciplinary Approach (3)

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PARTICLE POST – LETTERS FROM THE UNIVERSE: A SOUND INSTALLATION THROUGH
COSMIC MUONS

Abstract

We humans are all in a constant correspondence with the universe. It speaks to us ever so subtly, showering us with invisible remnants of our mutual distant past, across the magnitude of space and time. Yet, in the infinitely grand scale of all things universal, one tends to neglect the infinitely small. It is this omnipresent chronicle of the universe that is humanity's most intimate connection to the everywhere and always, spoken to us through invisible particles and waves of energy resembling the smallest of postcards and parcels. Within the journey of each traveling particle there lies a piece of a common history, a memoir of a voyage spanning billions of years, connecting humans, in this very point in space and time, to the dawn of the universe. How can humans truly appreciate the wonders of the universe through unheard sounds of invisible particles? With the aim for creating a space where humans can experience this in an appreciable way, ultimately enriching human lives, a sound installation is designed. Receiving cosmic muons (one of the fundamental particles constantly created by the interactions of cosmic rays with the Earth's atmosphere) through a scintillation detector, a postbox subtly emits sound and light as a direct consequence to each particle it detects. This unheard sound of the universe is the result of a poetic and artistic transformation. It is therefore not a product of mere sonification, but rather of a meaningful translation of what humans don't, and cannot directly perceive. It is through this process that the implied aesthetics of the unobservable are being explored, as are the means by which it could be indirectly appreciated in different ways through the bodies and minds of humans. In this paper, the background, concept, and the collaborative process of creating this installation, Particle Post – Letters from the Universe is discussed. With the team consisting of sound designers, artists, and an experimental physicist, it was presented at the Ars Electronica Festival 2019 in Linz, Austria. Considering these processes and the result, future directions of this project are also suggested.