XVIII International Conference on Topics in Astroparticle and Underground Physics (TAUP 2023)



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Art and Astrophysics in Conversation with KM3NeT Deep in the Mediterranean Sea

Wednesday, August 30, 2023 5:00 PM (15 minutes)

We present the result of a cross-disciplinary collaboration between Donald Fortescue of the California College of the Arts in San Francisco and researchers from the KM3NeT Collaboration. The project continues the successful art/science research collaboration between Fortescue and Gwenhaël De Wasseige, initiated during Fortescue's US National Science Foundation funded residency with IceCube at the South Pole in the austral summer of 2016/17.

Fortescue created an analog sound producing instrument which was installed within a standard KM3NeT spherical glass DOM. This instrument, titled "Bathysphere", was deployed in the sea for the first time adjacent to the ORCA array of KM3NeT off the coast of France on September 23, 2021.

The video work "Below the Surface" incorporates sound and video recorded from within the "Bathysphere" as it floated on the surface of the Mediterranean and then as it dived down to 300m depth. The sound in the dive portion of the video is created from the sonification of data from the KM3NeT array that was recorded during the deployment.

"Below the Surface" highlights the extraordinary environment in which the KM3NeT array is being created and operates. The data sonification illustrates the potential of this method of data representation to connect with viewers in a deeply physical way and offers new perspectives on the data collected by KM3NeT.

Submitted on behalf of a Collaboration?

No

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