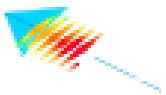

ID de la contribución : **87** Tipo : **no especificado**

The Pacific Ocean Neutrino Explorer (P-ONE) and its pathfinder missions

jueves, 20 de mayo de 2021 18:00 (20)

In the search for astrophysical neutrinos, neutrino telescopes instrument large volumes of clear natural water. Photomultiplier tubes placed along mooring lines detect the Cherenkov light of secondary particles produced in neutrino interactions, and allow us to search for possible neutrino sources in the sky. The P-ONE experiment proposes a new neutrino telescope off the shore of British Columbia, where it will complement the sky coverage of other neutrino telescopes.
To overcome the challenges of a deep-sea installation, we have developed prototype mooring lines in collaboration with Ocean Networks Canada, an initiative of the University of Victoria, which provides the infrastructure for many Oceanographic instruments. The STRAW and STRAW-b mooring lines, deployed in 2018 and 2020, provide continuous monitoring of optical water properties at a new possible detector site in the Pacific. We present the measurements of the pathfinder missions, and the plans for the future deployment of P-ONE.

Affiliation

University of Alberta

Primary author(s) : GAERTNER, Andreas (University of Alberta)

Presenter(s) : GAERTNER, Andreas (University of Alberta)

Clasificación de la sesión : Detector R&D and construction

Clasificación de temáticas : Future detectors