

## **Pacific Ocean Neutrino Experiment (P-ONE): prototype line development**

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### **What is this contribution about?**

This contribution covers the development of the first instrumented mooring line for the proposed neutrino telescope P-ONE, to be constructed in the Pacific Ocean off the coast of British Columbia, Canada.

### **Why is it relevant/interesting?**

P-ONE's main objective is to advance the field of neutrino astronomy by extending the cosmic frontier at the highest energies to unveil astrophysical phenomena, test fundamental physics at the PeV scale, and contribute to the compelling search of astrophysical sources and transient events in the emerging field of multi-messenger astronomy.

### **What have we done?**

The development of the P-ONE prototype line and its optical instruments started early 2021 and is currently in full progress with the investigation of new technologies for all associated components.

### **What is the result?**

We have developed novel concepts for the optical and calibration modules as well as the overlying mooring line structure, which bear the potential to greatly increase the detector's efficiency and significantly reduce the deployment effort.