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STRAW –STRings for Absorption length in Water

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Recent results presented by IceCube have demonstrated the potential of large instrumented volume type detectors for multi-messenger astronomy using neutrinos. Conducting deep astronomical observations with such type of detector requires increasing the sensitivity and therefore mostly the detector volume by around 2 orders of magnitude, a goal that might not be achievable with a single installation. Constructing a detector array of about 10 times the size of IceCube on the northern hemisphere in the ocean would mark a milestone towards real Neutrino astronomy.

STRAW is a pathfinder instrument for such an installation, consisting of two 120 m long instrumented strings, developed by the Technical University Munich in collaboration with the University of Alberta and Ocean Networks Canada (ONC). It has been deployed this year at Cascadia basin at 2.6 km b.s.l., in the northern Pacific, off the Canadian coast. The goal of the instrument is characterizing this site, which thanks to ONC is already equipped with an extensive power and data communication infrastructure, in terms of optical properties and bioluminescence. We will introduce this new instrument and show first preliminary results from our measurements.

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