

**XVIII Workshop on Neutrino Telescopes
Palazzo Franchetti – Istituto Veneto
Venice, 18-22 March 2019**

Poster Session Submission of Abstract

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Title of the Poster: **STRAW (STRings for Absorption length in Water):
pathfinder for a neutrino telescope in the deep Pacific Ocean**

Abstract Text: (no longer than 800 characters)

The project *STRAW* was born at the end of 2017 to be the first step of a broader feasibility study for a new large-volume neutrino telescope in the Pacific Ocean. The science goal is to investigate the optical properties of the deep-sea water at Cascadia Basin (B. C., Canada), with a special focus on scattering and absorption lengths. A dedicated study is also finalized to the monitoring of light background, in particular bioluminescence.

The installation is composed of two strings, equipped with 3 POCAM providing isotropic nanosecond light pulses at different wavelengths, and 5 optical modules hosting two 3" PMTs in a high pressure resistant titanium housing. The system has been deployed in June 2018 and connected to the deep-sea infrastructure of Ocean Network Canada.

The poster will describe all the realization process, from the design of the modules to their deployment; also some preliminary results of data-taking will be shown.

Summary: (no longer than 400 characters. Insert a tag, key word, topic, etc.)

The project *STRAW* is the first step of a feasibility study for a new large-volume neutrino telescope in the Pacific Ocean. The science goal is to investigate the optical properties (scattering lengths, absorption lengths and optical background) of the deep-sea water at Cascadia Basin. The installation (deployed in June 2018) is composed of two strings, equipped with 3 POCAM (providing isotropic nanosecond light pulses at different wavelengths) and 5 optical modules.

Kindly follow the instructions above and send the abstract (.pdf file) to <mailto:salente@pd.infn.it> by February 22nd 2019. Response will be sent to the submitter's e-mail address indicated above, by March 1st. Posters will be exhibited all week long at the workshop site. Discussion will take place on Thursday March 21st, during the Poster Party. At least one author must be available for "question-answer" time. Best 3 posters will be awarded on Friday 22nd, during the closing plenary session of the workshop.