



Contribution ID: 60

Type: not specified

## Acoustic neutrino detection investigations within ANTARES and prospects for KM3NeT

*Monday 14 September 2015 16:55 (15 minutes)*

The acoustic neutrino detection technique is a promising approach for future large-scale detectors with the aim of measuring the small expected flux of cosmogenic neutrinos at energies exceeding 100 PeV. It suggests itself to investigate this technique in the context of underwater Cherenkov neutrino telescopes, in particular KM3NeT, because acoustic sensors are present by design to allow for the calibration of the positions of the optical sensors. For the future, the KM3NeT detector in the Mediterranean Sea will provide an ideal infrastructure for a dedicated array of acoustic sensors. A particular advantage of such an array would be its interdisciplinary character as it could be used not only for acoustic neutrino detection, but also for purposes of marine science.

In this presentation results from the acoustic array AMADEUS of the ANTARES detector will be discussed with respect to the potential and implications for acoustic neutrino detection with KM3NeT and beyond.

**Author:** LAHMANN, R. (-)

**Presenter:** LAHMANN, R. (-)

**Session Classification:** Parallel Session C