

**XVI Neutrino Telescopes Workshop
Palazzo Franchetti - Venice, 2-6 March 2015**

Poster Session – Submission of Abstract

Submitter: Chiara Perrina, "La Sapienza" University of Roma and INFN, chiara.perrina@roma1.infn.it

Author: Chiara Perrina

Title of the Poster: Search for ultra-high energy neutrinos from above the horizon with the ANTARES telescope

Abstract Text: (no longer than 800 characters):

ANTARES, the first undersea neutrino telescope and the only one currently operating, consists of a matrix of 885 photomultiplier tubes arranged into 12 lines anchored to the sea bed at a depth of 2475 m in the Mediterranean Sea, ~ 40 km off the French coast near Toulon. Its main purpose is the detection of high-energy (TeV and beyond) neutrinos from cosmic accelerators, as predicted by hadronic interaction models, and the measurement of the diffuse neutrino flux. The location in the Northern Hemisphere allows for surveying a large part of the Galactic Plane, including the Galactic Centre, with the reconstruction of "up-going" neutrino events, i.e. neutrinos that reach the detector from below the horizon. This contribution will discuss a new strategy for the identification and the reconstruction of down-going neutrino events, with the aim to enlarge the field of view of the ANTARES and to increase the energy threshold of the search.

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

ANTARES, down-going neutrinos, background reduction.

Kindly follow the instructions above and send the abstract in a .pdf file to the local organizing committee e-mail address by January 30th.

Response will be sent to the submitter's e-mail address indicated above, by February 10th.

Posters will be exhibited all week long at the workshop site. Discussion will take place on Thursday 5th, during the Poster Party. At least one author must be available for "question-answer" time.

Best 3 posters will be awarded on Friday 6th, during the closing plenary session of the workshop.