## XVII Workshop on Neutrino Telescopes Palazzo Franchetti - Venice, 13-17 March 2017

## Poster Session Submission of Abstract

-----

Submitter: Fatma Sawy, fatmahalal.sawy@pd.infn.it

Author: Fatma Sawy, Luca Stanco

Title of the Poster: New approaches to the Neutrino Mass Hierarchy determination in JUNO

Abstract Text: The determination of the neutrino mass hierarchy if one of the major goals of the JUNO experiment. The data analysis foresees the collection of about 100,000 IBD events from reactors 53 km away from the Jiangmen site (China). So far only standard techniques have been used to determine the right mass hierarchy. New approaches will be illustrated in the poster. Statistical errors will be dealt with, as well as the systematic error due to the energy resolution of the detector. Perspetives for a full analysis with the JUNO Monte Carlo will be also given.

Summary: The determination of the neutrino mass hierarchy if one of the major goals of the JUNO experiment. The data analysis foresees the collection of about 100,000 IBD events from reactors 53 km away from the Jiangmen site (China). So far only standard techniques have been used to determine the right mass hierarchy. New approaches will be illustrated in the poster. Neutrino masses, ordering, JUNO, reactors.

Kindly follow the instructions above and send the abstract in a .pdf file to the local organizing committee e-mail address by February  $24^{th}$ . 2017.

Response will be sent to the submitter's e-mail address indicated above, by March  $3^{\rm rd}$ .

Posters will be exhibited all week long at the workshop site. Discussion will take place on Thursday March  $16^{\rm th}$ , during the Poster Party. At least one author must be available for "question-answer" time.

Best 3 posters will be awarded on Friday 17th, during the closing plenary session of the workshop.