

International workshop. Cetacean echolocation and outer space neutrinos:
ethology and physics for an interdisciplinary approach to underwater
bioacoustics and astrophysical particles detection



Contribution ID: 13

Type: **Invited Lecture**

Listening for neutrinos - from astrophysics to the deep sea - Part I

Friday, 18 October 2013 14:30 (50 minutes)

The use of acoustic methods for the detection of high energy neutrinos is one of a number of techniques that can be used to record these relativistic fundamental particles. This presentation will briefly justify the interest in high and ultra-high energy neutrinos as well as briefly discuss other techniques currently in use to detect them. The presentation will then turn to the acoustic detection of neutrinos, explaining the physical mechanisms involved and highlighting the unique physical characteristics of the expected signals. The presentation will conclude with a historical overview of earlier, pioneering activities in the field that will put the later presentations on current activities into a suitable perspective.

Presenter: THOMPSON, Lee (Sheffield Univ., UK)

Session Classification: Astrophysics with acoustics in deep sea