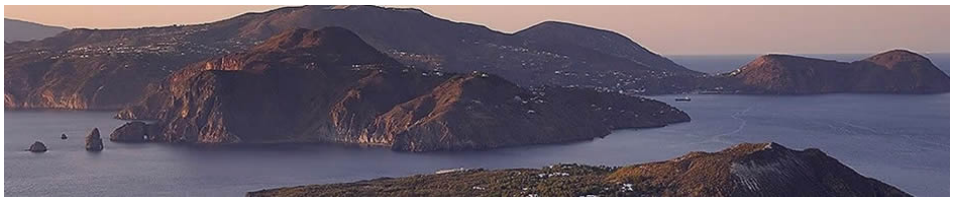

Contribution ID: **31** Type: **not specified**

Observations of HE Neutrino in a multimessenger approach

The SKK measured fluxes of solar neutrinos are the first example of the possible use of neutrino fluxes to identify, and locate, a neutrino source. The detection of neutrinos originated in the SN_1987-A as a counterpart of its optical observation has been the first example of a multi-messenger event. High Energy neutrino astronomy has been proposed, and after the IceCube discovery of the extragalactic neutrino flux is now a reality, to enlarge the visible horizon searching for the sources of the most energetic Cosmic Rays observed so far. ANTARES, and KM3NeT in the near future, are complementing in the North Hemisphere the IceCube experimental effort. The joint observation of astrophysical sources by four different messengers, electromagnetic radiation, Cosmic Rays, Neutrinos and eventually gravitational waves will not only allow to identify the sources but also to understand their nature, the acceleration mechanisms. Different messengers can be originated by different astrophysical processes, and thus their presence/absence carry important information about the sources. A description of the present and future search for H.E. neutrinos in the contest of the multi-messenger approach, will be presented.

Primary author: CAPONE, Antonio (ROMA1)

Presenter: CAPONE, Antonio (ROMA1)