



Contribution ID: 248

Type: poster

”Search for Time-Dependent Cosmic Neutrino Emission with ANTARES and KM3NeT”

Neutrino astronomy has achieved notable success in the last decade, thanks to the observation of the first probable cosmic neutrino sources. However, a clear identification remains elusive. Active galactic nuclei have been proposed as potential extra-galactic sources for neutrinos and high-energy cosmic rays. In this contribution, we present an analysis that focuses on the detection of cosmic neutrino sources correlated with gamma-ray flares from extra-galactic sources, in particular blazars. Constraining the neutrino emission to a given time period drastically reduces the expected background lowering the threshold for a significant detection compared to time-integrated searches. We present a search based on the hypothesis that neutrino emission happens simultaneously with gamma-ray emission in blazar flares. In particular, we target sources detected by Fermi-LAT, and use 15 years of data from ANTARES and 2 years from the KM3NeT/ARCA neutrino telescopes on its partial configurations.

Primary authors: SÁNCHEZ LOSA, Agustín (IFIC); PASTOR GÓMEZ, Emilio (IFIC); SALESA GREUS, Francisco (IFIC); ALVES GARRE, Sergio (IFIC); NAVAS CONCHA, Sergio (Universidad de Granada); CARENINI, Francesco (Istituto Nazionale di Fisica Nucleare); ILLUMINATI, Giulia (Istituto Nazionale di Fisica Nucleare)

Presenter: PASTOR GÓMEZ, Emilio (IFIC)

Session Classification: Poster Session