2018 European Nuclear Physics Conference



Contribution ID: 116 Type: not specified

The PTOLEMY experiment

Monday, 3 September 2018 15:11 (16 minutes)

The PTOLEMY project aims to develop a scalable design for a Cosmic Neutrino Telescope to detect the Big Bang relic neutrino. This will be the first of its kind and the only telescope conceived that can look directly at the image encoded in neutrino density fluctuations of the Universe in the first second after the Big Bang. The PTOLEMY prototype at Princeton has become the basis of a new world-wide collaboration consisting of seven countries and 29 institutions. The prototype will be setup in an underground site (proposal to LNGS is under review) and will validate many aspects of the technologies needed for the relic neutrino detection. It will also focus on the study of the background levels required in order to successfully detect events induced by Big Bang relic neutrino.

Selected session

Astroparticle

Primary author: Dr COCCO, Alfredo Giuseppe (INFN)

Presenter: Dr COCCO, Alfredo Giuseppe (INFN) **Session Classification:** Astroparticle Physics