Contribution ID: **61** Type: **not specified**

Neutrinos oscillation : a qualitative analysis

Friday 28 October 2022 13:30 (15 minutes)

To explain the experimental results of neutrino oscillations it is necessary to consider
hope that these particles are massive; however, the standard model of particle physics
elements, the most successful theoretical scheme that explains with good precision three of the four interfundamental actions of nature, neutrinos are assumed to be massless particles.
The difficulty in solving this problem entails a physics beyond the standard model, extending
sions of the standard model, which allow mechanisms that generate mass for neutrinos.
In this contribution, a conceptual and historical review of the Physics of neutrinos is elaborated, from his nomination by Wolfang Pauli, to the most recent investigative advances to theoretical and experimental level. We consider it of paramount importance to analyze the external perspectives experiments that can provide partial answers about the masses and oscillations of the neutrinos.
Keywords: neutrino, oscillation, flavor, standard model, Majorana, Dirac

Primary author: Ms CORREA ANGEL, Silvia Lucia (Universidad Surcolombiana, Neiva, Colombia)

Co-author: SIERRA, Hernando Gonzalez (Universidad Surcolombiana, Neiva, Colombia)

Presenter: Ms CORREA ANGEL, Silvia Lucia (Universidad Surcolombiana, Neiva, Colombia)

Session Classification: High energy astronomy and astronomical physics