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Updated measurement of atmospheric neutrino oscillation parameters with KM3NeT/ORCA

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KM3NeT/ORCA is a 7 Mton water-Cherenkov neutrino detector being built by the KM3NeT Collaboration at the bottom of the Mediterranean Sea at a depth of 2450 meters off the coast of Toulon, France.
The main goal of this experiment is to determine the neutrino mass ordering as well as measuring oscillation parameters for the atmospheric neutrino sector.

The ORCA detector has been growing in size with more detection units being deployed every year.
The first analysis of a new data sample including detector configurations with 6, 10 and 11 detection units will be presented in this contribution.
The sample corresponds to a 3 year period from January 2020 to December 2022.
The newest measurement of the mixing angle θ_{23} and the mass splitting Δm^2_{31} using atmospheric neutrinos will be discussed. Additionally, the sensitivity of the ORCA detector to the neutrino mass ordering using the current available data will be reported.

Poster prize

Yes

Given name

Santiago

Surname

Peña Martínez

First affiliation

APC

Second affiliation

Institutional email

spenam@apc.in2p3.fr

Gender

Male

Collaboration (if any)

KM3NeT

Primary author: PEÑA MARTÍNEZ, Santiago (APC)

Presenter: PEÑA MARTÍNEZ, Santiago (APC)

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