

## Neutrino oscillation measurement with KM3NeT/ORCA

*Friday, 5 August 2022 11:15 (22 minutes)*

KM3NeT/ORCA is an underwater neutrino telescope which is currently being deployed in the Mediterranean Sea. Its geometry has been optimized for the study of neutrino oscillations using atmospheric neutrinos. In particular this will allow to measure the neutrino mass ordering as well as  $\theta_{23}$  and  $\Delta m_{31}^2$ . The performance of ORCA with a 6 string configuration and one year of exposure already allowed to exclude the non-oscillation hypothesis with more than  $5\sigma$ . In this contribution an update of these results will be presented and the sensitivity of a full ORCA detector will be discussed.

### Attendance type

In-person presentation

**Primary author:** SCHUMANN, Johannes (Friedrich-Alexander-Universität Erlangen-Nürnberg)

**Presenter:** SCHUMANN, Johannes (Friedrich-Alexander-Universität Erlangen-Nürnberg)

**Session Classification:** WG1: Neutrino Oscillations

**Track Classification:** WG1: Neutrino Oscillation Physics