



ID de Contribution: 111

Type: Non spécifié

## JUNO physics prospects

*mardi 28 mars 2023 12:15 (25 minutes)*

The Jiangmen Underground Neutrino Observatory (JUNO) is a multipurpose observatory under construction in China. The JUNO detector consists of a 20kton liquid scintillator target monitored by about 18k 20 inch PMT and about 26k 3 inch PMT. This detector is strategically located 53 km from the Taishan and Yangjiang Nuclear Power Plants in order to precisely measure reactor anti-neutrino oscillations. With these measurements JUNO will be able to achieve sub-percent precision on several oscillation parameters as well as determination of the neutrino mass ordering to 3 sigma in 6 years of operation. Besides reactor anti-neutrinos, JUNO will also be able to study neutrinos from several other sources, such as solar or supernova neutrinos, and to search for BSM physics. This talk will provide an overview on JUNO's physics potential.

**Author:** ATHAYDE MARCONDES DE ANDRE, Joao Pedro (IPHC)

**Orateur:** ATHAYDE MARCONDES DE ANDRE, Joao Pedro (IPHC)

**Classification de Session:** Session

**Classification de thématique:** Neutrinos