

Status and progress of the JUNO detector

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The Jiangmen Underground Neutrino Observatory (JUNO) is a neutrino oscillation experiment with a 53 km distance from reactors and a 700m overburden, currently under construction in southern China. The primary goal is to measure the neutrino mass hierarchy with better than 3σ after 6 years of data taking. Therefore 20 kton high transparency liquid scintillator, high coverage (75%) of photomultiplier tubes and low backgrounds are needed to achieve energy resolution of 3% @ 1MeV and calibration error lower than 1%. This is the most challenging design in the reactor neutrino experiments throughout the world. The large detector also have the huge potential to measure three oscillation parameters and neutrinos from various terrestrial and extra-terrestrial sources. This talk will present JUNO project status, progress and also JUNO-TAO.

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