

Tested Performance of JUNO 20" PMTs

Authorship annotation

for the JUNO collaboration

Session and Location

Monday Session, Poster Wall #179 (Ballroom)

Abstract content

The physical goal of the Jiangmen Underground Neutrino Observatory (JUNO) is to determine the neutrino mass hierarchy by precisely measuring the oscillation spectrum with 3% energy resolution at 1 MeV. Totally 20000 large area 20" tubes with high photon detection efficiency will be used to achieve this motivation, including 5000 Hamamatsu dynode PMTs and 15000 NNVT MCP PMTs. The JUNO collaboration has built two systems to measure the performance of these tubes, which has been running since July 2017 and about 4000 tubes have been tested already. The key parameters including detection efficiency, dark count, rise time, fall time and operating HV will be shown in the poster. The PMTs can meet the requirements of JUNO detector.

Poster included in proceedings:

yes

Primary author(s) : Mr. ZHANG, Haiqiong (IHEP)

Co-author(s) : Dr. WANG, Zhimin (Institute of High Energy physics, CAS)

Presenter(s) : Mr. ZHANG, Haiqiong (IHEP)

Session Classification : Poster Session Monday

Track Classification : Poster (participating in poster prize competition)