

The 3-inch PMTs of the JUNO experiment

Authorship annotation

for the JUNO Collaboration

Session and Location

Monday Session, Poster Wall #105 (Auditorium Gallery Left)

Abstract content

In addition to 18000 20-inch large PMTs (LPMTs), the JUNO Experiment will use 25000 3-inch small photomultiplier tubes (SPMTs) to help control the non-stochastic term of the energy resolution and to improve the reconstruction of cosmic-ray muons and supernova burst neutrino events, among other benefits. The 3-inch PMTs are required to have good resolution for single photoelectrons, high quantum efficiency, good transit time spread and low dark rate. Production of custom-designed 3-inch PMTs is now in progress at Hainan Zhanchuang Photonics Technology Co. (HZC PHOTONICS). This poster will provide an overview of the design, status and performance testing of the 3-inch PMTs of JUNO.

Poster included in proceedings:

yes

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Session Classification : Poster Session Monday

Track Classification : Poster (participating in poster prize competition)