

## The PMT Mass Testing System for JUNO

To reach the goal of determining the neutrino mass hierarchy, all parts of the JUNO experiment need to meet certain quality criteria, especially those which are related to the final energy resolution of the detector. This is relevant in particular for the 20'000 20-inch photomultiplier tubes (PMTs) to be deployed in JUNO. Therefore, all PMTs will be checked and characterized with two specially designed PMT mass testing facilities before being mounted into the JUNO detector. With this PMT mass testing system, several key characteristics like dark rate, peak-to-valley ratio, photon detection efficiency and timing resolution are targeted to be measured in a stable and comparable way to make all meet the requirements of JUNO.

The poster will introduce the design and the general characteristics of the system, the current status, the progress in the PMT testing and preliminary results.

### Authorship annotation

B. Wonsak, A. Tietzsch for the JUNO collaboration

### Session and Location

Monday Session, Poster Wall #176 (Ballroom)

### Poster included in proceedings:

yes

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**Track Classification:** Poster (participating in poster prize competition)