

## The Filling System Slow Control for JUNO

In the planned JUNO (Jinangmen Underground Neutrino Observatory) Detector 20 kt of liquid scintillator (LS) will be used as neutrino target. A 120 mm thin highly transparent acrylic hollow sphere stores the target in a water tank. Slightly different filling levels in the tank and the sphere during the filling of these volumes or during detector operation could cause fatal damage of the sphere. Therefore precise monitoring and regulating of the hydrostatic and gas pressure in both volumes as well as controlling the mechanical stress on the acrylic is necessary. Also the filling levels and the temperatures in the water tank and the sphere have to be monitored and regulated. For this tasks testing facilities have been developed for pump controlling at Sun Yat-Sen University and for sensor development at Technical University of Munich. The poster will present the first results of these setups as well as the status of the planned slow control system for the central detector.

### Authorship annotation

Hans Th. J. Steiger on behalf of the Juno Collaboration

### Session and Location

Monday Session, Poster Wall #182 (Ballroom)

### Poster included in proceedings:

yes

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