Contribution ID: **154** Type: **Poster reactor**

Calibration and quality assurance of the SoLid detector

SoLid is a short baseline neutrino oscillation experiment, which is searching for sterile neutrinos at the SCK·CEN BR2 reactor in Belgium. It uses a novel technology, combining PVT cubes of $5\times5\times5$ cm^3 and ^{6}LiF:ZnS sheets of ~ 250 μm thickness. To detect anti-neutrino interactions, signals are read out by a network of wavelength shifting fibers and MPPCs.
This fine granularity (12800 cubes) provides powerful tools to distinguish signal from background, but presents a challenge
in ensuring homogeneous detector response and calibrating light yield and neutron detection efficiency.
This poster describes the results of the quality assurance process with CALIPSO system, which was deployed to perform a first calibration of the 50
detector planes to identify and correct any deficient components during the detector construction.

Authorship annotation

for the SoLid collaboration

Session and Location

Monday Session, Poster Wall #171 (Ballroom)

Poster included in proceedings:

yes

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Track Classification: Poster (participating in poster prize competition)