

ANNIE: Accelerator Neutrino Neutron Interaction Experiment



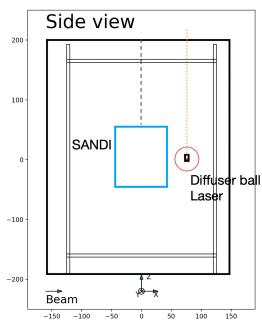
Cathal Sweeney and Carrie McGivern on behalf of the ANNIE collaboration PMG experiments meeting 12th December 2024



SANDI v2

- SANDI vessel v2 (WbLS + Gd) is still deployed
 - We have completed neutron calibration campaign with AmBe source
 - As of Tuesday, we are taking neutrino data with WbLS+Gd
 - Weekly tests of tank water continue show no signs of leakage from vessel

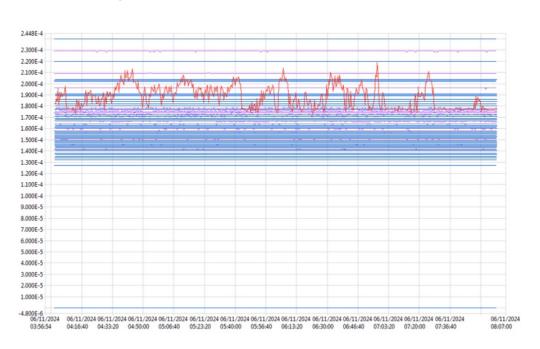


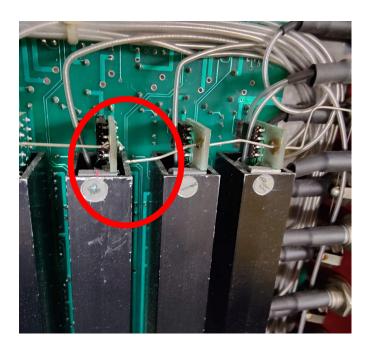




CAEN high voltage cards

- We have had occasional current instabilities in some tank PMTs
 - 3 times in the last ~ 45 days
- Issue is a broken connection in CAEN card
- Easily fixed, but leads to PMT downtime of 1-2 days

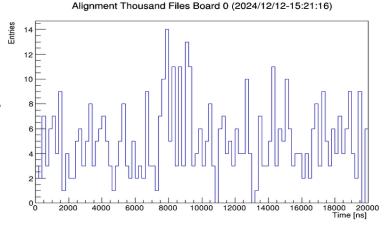


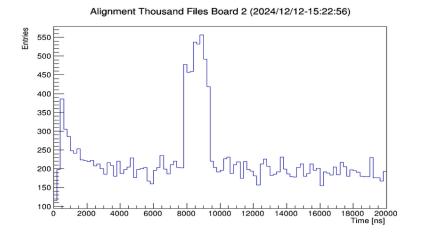


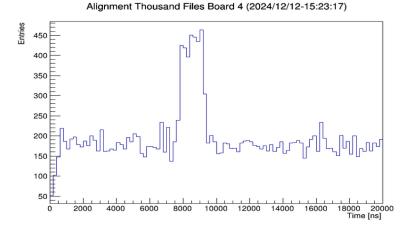


LAPPDs

- 3 LAPPDs seeing neutrino data in WbLS+Gd!
- One LAPPD has low rate, which is under investigation
- A fourth LAPPD is under testing for deployment soon









Summary

- We are detecting neutrinos with SANDI v2
- All systems are performing well
- 3 LAPPDs in the water, and more and the way

