



ANNIE: Accelerator Neutrino Neutron Interaction Experiment

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on behalf of the ANNIE collaboration

PMG experiments meeting

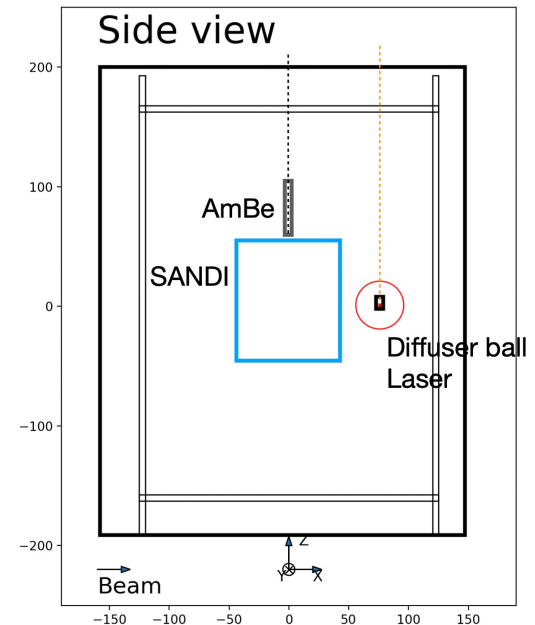
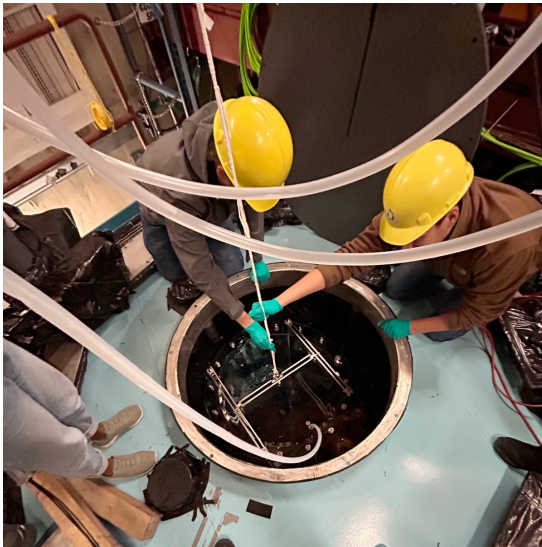
7th November 2024

**IOWA STATE
UNIVERSITY**



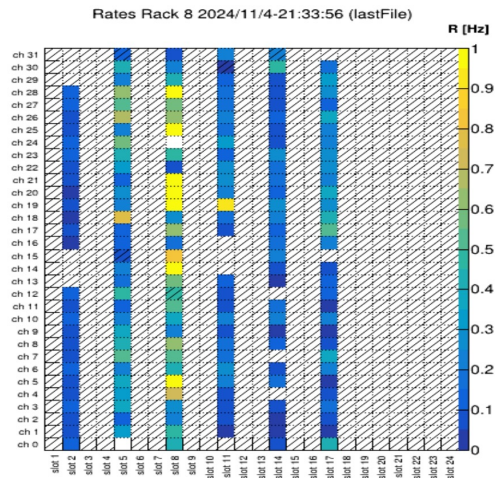
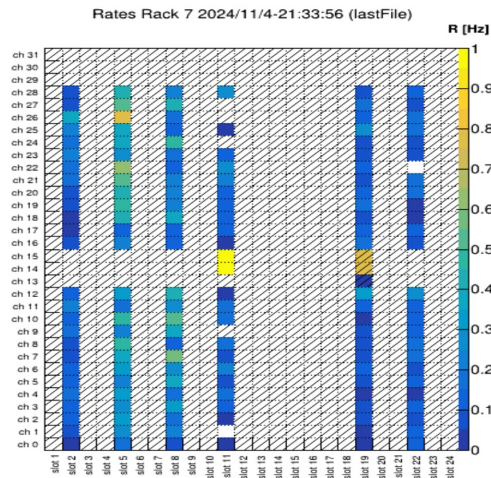
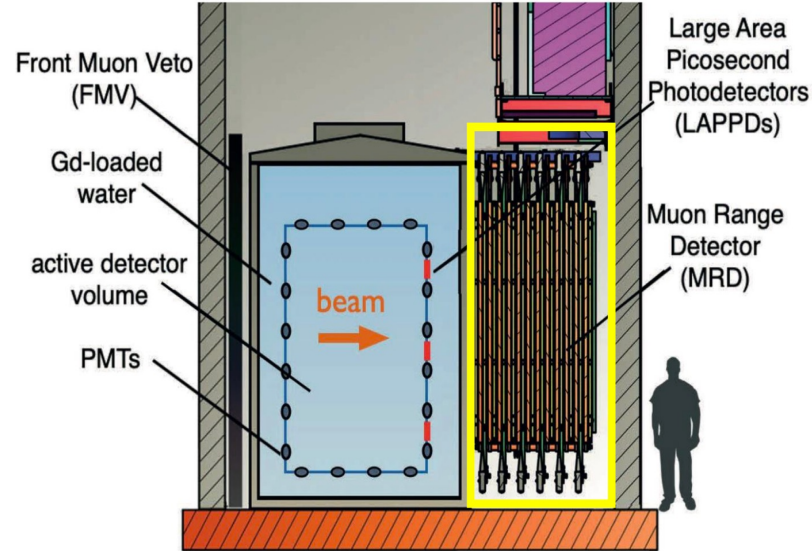
SANDI v2

- SANDI vessel v2 (WbLS + Gd) is still deployed
 - We have taken data with AmBe neutron calibration source at several locations
 - Also taking cosmic and laser runs
 - Weekly tests of tank water show no signs of leakage from vessel



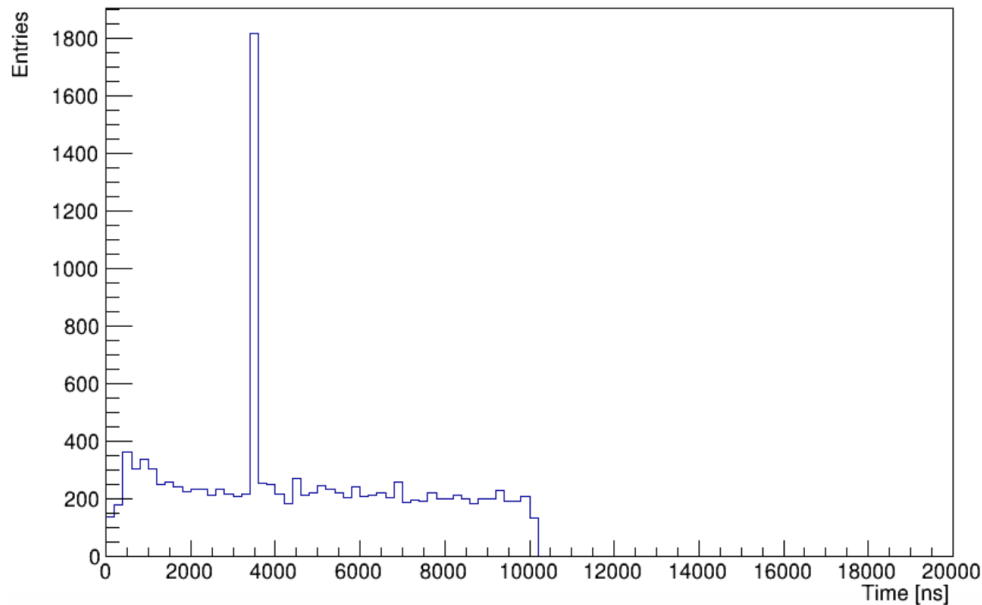
Muon range detector (MRD)

- Replaced a faulty CAMAC crate powering our MRD readout electronics
 - Led to improvement in MRD efficiency
- Deployed new MRD trigger
 - Previously triggered on activity in first two and last two layers
 - Now trigger on activity in all layers
 - Less biased and higher rate



LAPPDs

- 3 LAPPDs in the water
 - Occasional communications issues, but operating stably now
- 4th LAPPD under testing in the dark room at lab 6
 - Aiming to deploy early in the beam year



Summary

- Ready to detect neutrinos with SANDI v2
- MRD performing better since replacing crate
- 3 LAPPDs in the water, and more and the way