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Overview of the CAPTAIN detector and preliminary results from neutron run.

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The CAPTAIN (Cryogenic Apparatus for Precision tests of Argon Interactions with Neutrinos) experiment is a five-ton liquid Argon Time Projection Chamber at Los Alamos National Laboratory. CAPTAIN is designed to make measurements of liquid argon interactions relevant to neutrino physics in particular for the proposed DUNE (Deep Underground Neutrino Experiment) underground detector. In addition to the wire planes on the TPC, CAPTAIN is instrumented with a cold photon detection system (PDS) to capture the Argon scintillation. The information from the PDS will help with event-timing reconstruction as well as complement the energy measurement from the TPC. A prototype detector called Mini-CAPTAIN, 400 kg of liquid Argon with 24 6cm^2 PMTs, collected data at the neutron beam at LANL this summer. In this talk, we discuss the performance of the PDS in the Mini-CAPTAIN run and the challenges ahead of the full scale CAPTAIN detector.

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