Construction and Testing of PICO-500 Muon Veto Calibration System

Tuesday, August 20, 2024 8:45 AM (10 minutes)

A key challenge faced by bubble chamber experiments searching for dark matter, is that many other types of particles can also nucleate bubbles. PICO-500 will employ a photomultiplier tube based muon veto system to distinguish between bubbles from muons and DM. An array of LED drivers will use blue LEDs to calibrate and monitor the PMTs to ensure proper operation and accurate vetoing of muon events. Construction and testing of this calibration system has been ongoing this summer.

What area of study best describes your talk?

Engineering

If you answered 'Other', please provide the study area.

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