

Large Area WLS plate as a visible light photon detector

The detection of neutrinos requires large volume detector systems, often based on scintillation materials or the Cherenkov effect. Large area visible light photon counters are a major cost factor for these modern experiments. Wave-length shifting plates coupled to SiPM are studied as a viable alternative for large area photon sensing. The properties of a developed prototype, its efficiency, timing and noise characteristics are described and evaluated in comparison to conventional vacuum photon sensors.

Abstract title

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Session Classification: Neutrino detection & technology