

Abstract Submitted
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Testing a Prototype for a New Cosmic Ray Particle Detector at the South Pole R. HOWELL, E. RIMSA, T. THARP, K. ANDEEN, Marquette University — Cosmic ray research has grown rapidly in the past century, often using vacuum photomultiplier tubes (PMTs) to analyze the light produced by high-energy particles passing through scintillating material. Silicon photomultipliers (SiPMs) are now being recognized as a more efficient alternative to PMTs. Different types of photon events have been characterized using a SensL brand SiPM in combination with a QuarkNet Data Acquisition board. The goal of this study is to test the viability of the SiPM for a new generation surface detector at the South Pole.

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