

SiPM detectors in CTA

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Abstract

Silicon photo multipliers (SiPM) are semiconductor photo detectors, which are strong competitors to the classical PMTs. SiPM detectors are arrays of single avalanche photo-diodes with great detection capability of even extremely low intensity light signals (single photon count). The robust design, array-structure and configuration of SiPM detectors offer great potential for their use in gamma ray detectors. In this talk, we'll discuss about the characteristic features of SiPM detectors, and their potential in large array or module of detector systems. We'll discuss about the use of SiPMs as the camera system of Cherenkov Telescope Array (CTA) Project, which is an upcoming array of Imaging Atmospheric Cherenkov telescopes that aims at making measurements of the gamma-ray sky with unprecedented details from 20 GeV to ~ 300 TeV.

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