

SiPM and Cherenkov radiation detectors in water

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The first results obtained with a new Cherenkov photodetector using silicon photomultipliers (SiPMs) will be presented. I will present the concept of operation of this photodetector, which we call C-Arapuca, which uses a dichroic filter and a wavelength shifter bar to trap photons in a box containing SiPMs. The study of the performance for detecting muons of cosmic radiation was carried out using a tank containing 550 liters of ultrapure water and the detection efficiency obtained was 80%. A second version of the C-Arapuca that is being built will be presented.

Charla presencial o virtual

Presencial

Autor primario: FAUTH, Anderson (State University of Campinas - UNICAMP)

Presentador: FAUTH, Anderson (State University of Campinas - UNICAMP)

Clasificación de la sesión: Charlas cortas