

## On a Three-Channel Cosmic Ray Detector based on Aluminum Blocks

### Abstract

There are many general purpose cosmic ray detectors based on plastic scintillators and electronic boards from the market. This is a new cosmic ray detector designed on three 2.54 cm X 5.08 cm X 20.32 cm Aluminum blocks in stack arrangement, and three Hamamatsu S12572-100P photodiodes. The photodiode board, the passive electronic board, and the discriminator board are own designed. The electronic signals are stored with a CompactRIO -cRIO- by National Instruments. It is presented the design, the construction, the data acquisition system algorithm, and the preliminary physical results.

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