

## A Radiation Monitor for space applications

The Radiation Monitor (RadMon) consists of a telescopic arrangement of high Z absorbers and plastic scintillators coupled with silicon photomultipliers (SiPMs). The SiPMs signals are processed and digitized with the BETA ASIC, which was specifically designed for SiPM readout in space applications. The monitor will output proton detection rates in a set of integral energy channels with expected thresholds ranging from  $\sim 70$  MeV to  $\sim 1$  GeV.

Here, I describe the design of the prototype built and the preliminary results of the performance evaluation from dedicated beam tests and ad hoc MonteCarlo simulations made in the framework of my PhD project research.

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