## Ultrafast Imaging and Tracking Instrumentation, Methods and Applications Conference (ULITIMA 2023)



Contribution ID: 21 Type: Invited

## Fast timing detectors with applications in cosmic ray physics and medical science

Tuesday, 14 March 2023 08:45 (30 minutes)

We first describe the development of a fast readout system of an LGAD detector using the waveform technique. We use this detector to measure the type of particles and their energy in cosmic ray measurements in space in collaboration with NASA. We will show the results of the simulation of the detectors as well as the first tests performed before the launch foreseen by the end of the year. We also describe another application related to the measurement of the dose received by a patient during flash beam treatment of cancer.

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