

## CALET: a calorimeter for cosmic-ray measurements in space

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The CALorimetric ELEctron Telescope (CALET) is a space-station-borne experiment aimed at precise measurements of the electron+positron, ion and gamma-ray components of the cosmic-ray spectrum, in an energy range starting from tens of GeV up to tens of TeV. The heart of the detector is a deep ( $\sim 27 X_0$ ) homogeneous calorimeter made by lead tungstate (PWO) scintillating bars, which can measure the energy of electrons and gamma-rays with an uncertainty of a few percent and give an electron/proton rejection factor about  $10^5$ . An imaging pre-shower calorimeter composed of tungsten and scintillating fibers is used to track the incoming particle, while charge identification is done by means of a system of scintillating rods. The design and performance of the detector will be presented, together with some preliminary results based on Monte Carlo simulations.

**Primary author:** Dr MORI, Nicola (FI)

**Presenter:** Dr MORI, Nicola (FI)

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