

Expected performance of the High-Energy Particle Detector on-board the second China Seismo-electromagnetic Satellite.

- What is this contribution about?

The contribution is about the study of the HEPD-02 expected performance as from simulation to validate its design.

- Why is it relevant / interesting?

It shows the capability of the new detector design to reveal electrons and protons with low energy threshold.

- What have we done?

A GEANT4 simulation of the full detector has been developed and reconstruction algorithms were implemented to study particle identification and energy / angular resolution for protons, electrons and light nuclei.

- What is the result?

Preliminary results show low thresholds configuration, good particle identification and good reconstruction resolution.