

Tipp 2014 - Third International Conference on Technology and Instrumentation in Particle Physics



Abstracts book

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Energy measurement with the SDHCAL prototype

Content :

The SDHCAL prototype that was completed in 2012 was exposed to beams of pions, electrons of different energies at the SPS of CERN for a total time period of 5 weeks. The data are being analyzed within the CALICE collaboration. However preliminary results indicate that a highly granular hadronic calorimeter conceived for PFA application is also a powerful tool to separate pions from electrons. The SDHCAL provides also a very good resolution of hadronic showers energy measurement. The use of multi-threshold readout mode shows a clear improvement of the resolution at energies exceeding 30 GeV with respect to the binary readout mode. New ideas to improve on the energy resolution using the topology of hadronic showers will be presented.

Primary authors : Dr. PETRUKHIN, Alexey (IPNL/CNRS)

Co-authors :

Presenter : Dr. PETRUKHIN, Alexey (IPNL/CNRS)

Track classification : Sensors: 1a) Calorimetry

Contribution type : --not specified--

Submitted by : PETRUKHIN, Alexey

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