FRONTIER DETECTORS FOR FRONTIER PHYSICS
 on Advanced Detectors
 or>



Contribution ID: 93 Type: Oral

New results from the RD52 (DREAM) project

Friday, 29 May 2015 18:10 (15 minutes)

Simultaneous detection of the Cherenkov light and

scintillation light produced in hadron showers makes it possible to measure the electromagnetic shower fraction event by event and thus eliminate the detrimental effects of fluctuations in this fraction on the performance of calorimeters.

In the RD52 (DREAM) project, the possibilities of this dual-readout calorimetry are investigated and optimized. In this talk, the latest results of this project will be presented. These results concern tests of a dual-readout fiber calorimeter with electrons at very small angles of incidence, detailed measurements of the time structure of hadron showers in this detector, as well as elaborate comparisons of various aspects of the calorimeter performance with GEANT4 simulations.

Primary author: Prof. WIGMANS, Richard (Texas Tech University)

Presenter: Prof. WIGMANS, Richard (Texas Tech University)

Session Classification: Calorimetry

Track Classification: S9 - Calorimetry