

Abstract Submitted
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Intercalibration Analysis in the Calorimeter/ITC from the Atlas Detector Using Cosmic Ray Data CARLOS MEDINA, University of Texas at Arlington — The Large Hadron Collider is the largest most ambitious experiment in high energy physics history. It involves the greatest number of scientists from around the world. The first collisions will start being produced in late 2009 and we expect that the information collected will help us understand the physics behind the standard model such as higgs physics and the supersymmetric theories. The high energy physics group in UTA is actively involved with the design, construction and commissioning process of the ATLAS Tile Calorimeter. This work presents an analysis on the inter-calibration of the ITC (intermediate tile calorimeter) cell response to cosmic rays detection. Based on the cosmic data recently taken in the ATLAS detector, while waiting for real collisions, we are able to compare values of energy deposition in individual cells to guarantee the homogeneous performance of the ITC.

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