

Abstract Submitted
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Performance of the ATLAS Tile Calorimeter¹ STEPHE COLE,
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Calorimeter is the central section ($0 < |\eta| < 1.7$) of the ATLAS hadronic calorime-
ter. It is a key detector for the measurement of hadrons, jets, tau leptons decaying
hadronically, and missing transverse energy. Because of its very good signal to
noise ratio it is also useful for the identification and reconstruction of muons. The
calorimeter consists of thin steel plates and 460,000 scintillating tiles configured
into 4900 cells, each viewed by two photomultipliers. The calorimeter response is
monitored to better than 1% using radioactive source, laser, and electronic charge
injection systems. The calibration and performance of the calorimeter have been es-
tablished through test beam measurements, cosmic ray muons and the large sample
of pp collisions acquired during 2011 and 2012. Results on the calorimeter per-
formance will be presented, including the absolute energy scale, time resolution,
and associated stabilities. These results demonstrate that the Tile Calorimeter is
performing well within the design requirements and is giving essential input to the
physics results.

¹On behalf of the ATLAS Tile Calorimeter group

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