Performance of the ATLAS Calorimeters and Commissioning for LHC Run-2
Valerio Rossetti, on behalf of the ATLAS collaboration

Data-quality and monitoring

First Run-2 data
In first Run-2 operations, the LHC delivered the so called "beam splashes", which have been used to validate and further improve the calorimeter timing.

In a 7-ns event, the bunches hit a completely closed collimator 140 m far from the center of ATLAS. This results in a large multiplicity of particles (mostly muons) that hit the detector at the same time, and deposit a considerable amount of energy in all cells.

This setup is particularly suitable for calibration and validation of the detector timing. The plots show the measured time of the reconstructed energy pulses in various parts of the calorimeters.

The plots take into account the Time-Of-Flight (TOF) of the muons traveling along the beam direction.

A dedicated talk by Ilya Korolkov.

Upgrade activities of the ATLAS calorimeters are described in EPS-HEP Conference - July 2015 PUB-2015-021

References
[2] Electron and photon energy calibration with the ATLAS liquid argon calorimeter, JINST 9 P07024
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