



ATLAS Tile Calorimeter Upgrades for HL-LHC

Stylianos Angelidakis

Laboratoire de Physique de Clermont-Ferrand
on behalf of the ATLAS TileCal collaboration

14th Pisa Meeting on Advanced Detectors,
27 May 2018

In order to cope with the high trigger rates and intense radiation environment, expected at the High Luminosity (HL) LHC, the ATLAS Tile Calorimeter (TileCal) will be upgraded with re-designed electronic systems that will ensure optimal performance in its future operation.

The TileCal upgrade program includes:

- redesign of all the readout electronics components (front- and back-end) to adopt the new ATLAS readout Trigger and DAQ architecture;
- improved reliability with a full redundant system with no single-point failure;
- revised calibration systems (charge injection, Cesium system, laser system);
- new mechanical structure, including new tools for easier installation and maintenance of the electronics.

