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ATLAS LAr Calorimeter Commissioning for LHC Run-3

Liquid argon (LAr) sampling calorimeters are employed by ATLAS for all electromagnetic calorimetry in the pseudo-rapidity region $|\eta| < 3.2$, and for hadronic and forward calorimetry in the region from $|\eta| = 1.5$ to $|\eta| = 4.9$. In the first LHC run a total luminosity of 27 fb–1 has been collected at center-of-mass energies of 7-8 TeV. After detector consolidation during a long shutdown, Run-2 started in 2015 and about 150fb-1 of data at a center-of-mass energy of 13 TeV was recorded. With the end of Run-2 in 2018 a multi-year shutdown for the Phase-I detector upgrades was begun. As part of the Phase-I upgrade, new trigger readout electronics of the ATLAS Liquid-Argon Calorimeter have been developed. Installation began at the start of the LHC shut down in 2019 and is expected to be completed in 2020. A commissioning campaign is underway in order to realize the capabilities of the new, higher granularity and higher precision level-1 trigger hardware in Run-3 data taking. This contribution will give an overview of the new trigger readout commissioning, as well as the preparations for Run-3 detector operation and changes in the monitoring and data quality procedures to cope with the increased pileup.

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