

Technical challenges and performance of the new ATLAS LAr Calorimeter Trigger

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To cope with the increase of the LHC instantaneous luminosity, new trigger readout electronics were installed on the ATLAS Liquid Argon Calorimeters.

On the detector, 124 new electronic boards digitise at high speed 10 times more signals than the legacy system. Downstream, large FPGAs are processing up to 20 Tbps of data to compute the deposited energies. Moreover, a new control and monitoring infrastructure has been developed.

This contribution will present the challenges of the commissioning, the first steps in operation, and the milestones still to be completed towards the full operation of both the legacy and the new trigger readout paths for the LHC Run-3.

Collaboration

Role of Submitter

The presenter will be selected later by the Collaboration

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