Commissioning the ALICE Experiment

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ALICE (A Large Ion Collider Experiment) is the heavy-ion detector designed to study the physics of strongly interacting matter and the quark-gluon plasma at the CERN Large Hadron Collider (LHC). A large bandwidth and flexible Data Acquisition System (DAQ) has been designed and deployed to collect sufficient statistics in the short running time available per year for heavy ion and to accommodate very different requirements originated from the 18 sub-detectors.

This paper will present the large scale tests conducted to assess the standalone DAQ performances, its interfaces with the other online systems and the extensive commissioning performed in order to be fully prepared for physics data taking. It will review the experience accumulated since May 2007 during the standalone commissioning of the main detectors and the global cosmic runs and the lessons learned from this exposure on the "battle field". It will also discuss the test protocol followed to integrate and validate each sub-detector with the online systems and it will conclude with the first results of the LHC injection tests and startup in September 2008.

Several abstracts of the same conference present in more details some elements of the ALICE DAQ system.

Summary

- Commissioning and initial experience with the ALICE on-line.
- Statistics and outcome of the cosmics run periods

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