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## The ATLAS detector – status and plans.

DAVID LISSAUER, Brookhaven National Lab.

The ATLAS detector is preparing for the first data at the Large Hadron Collider (LHC) at CERN. The LHC is a proton-proton Collider with 14 TeV center of mass energy and a designed luminosity of  $10^{34}$  cm<sup>-2</sup>s<sup>-1</sup>. Beam crossings are 25 ns apart and at designed luminosity there are  $\sim 23$  interactions per crossing. The LHC thus presents an enormous experimental challenge to enable us to select the small fraction of interesting events and to measure their properties. The main components of the ATLAS detector include: The Magnet system that is composed of two main magnet systems, a central superconducting solenoid that provides the field for the central tracker, and a large superconducting Barrel and End-cap air-core Toroids outside the calorimeter that provides the field for the muon spectrometer. The Inner Detector (ID) of tracker allows pattern recognition, momentum measurements, and electron identifications at high luminosity. This is achieved using a combination of high resolution pixel and silicon strip detectors in the inner part of the tracking volume and a straw tube tracking with transition radiation capability in its outer part. A high granularity liquid Argon (LAr) electromagnetic calorimeter has excellent performance in term of energy and position resolution. In the end-caps, the LAr technology is also used for hadronic and special forward calorimeters. The bulk of the hadronic calorimeter is provided by a novel scintillator-tile calorimeter. The combined calorimeter system gives a very good jet and missing  $E_T$  resolution. The muon spectrometer surrounds the calorimeter system and is composed of the air-core Toroids system that generates a large magnetic field volume with strong bending power. The air core Toroid minimizes the multiple scattering, and the excellent muon momentum resolution is achieved with three stations of high precision tracking chambers. This gives the external muon spectrometer stand alone capabilities that are important at high luminosity. The trigger system is composed of Level 1 triggers with a 75 kHz rate followed by high level trigger to make finer selection. The Level 1 trigger relies on the calorimeter and muon information while the High level trigger has the full information for the regions of interest allowing for finer selection. The construction of the ATLAS experiment is nearly complete and the installation and commissioning is progressing in preparation for first beams. We will describe the present status of the installation and commissioning of ATLAS detector and the plans for completing the installation and commissioning the detector prior to the first collisions.