## FRONTIER DETECTORS FOR FRONTIER PHYSICS



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## **ATLAS Detector Overview**

Monday, 21 May 2012 10:00 (20 minutes)

The ATLAS experiment was designed to explore a broad variety of phenomena that may arise in the high energies proton-proton collisions at the Large Hadron Collider (LHC). It was optimized for the search for the Higgs Boson in the largest possible mass range as well as for the search for heavy new particles such as those expected in supersymmetric models. The detector has been successfully taking data since first LHC collisions in Nov 2009. Over the last year the experiment collected data with an efficiency of close to 95% accumulating more than 5/fb of proton-proton data. In this period the luminosity dramatically increased, leading to a maximum of ~15 interactions per bunch crossing at the end of the 2011. During 2011 ATLAS also collected ~150/ub of data during the LHC lead-lead collision run. We present the status of the detector as well as the key aspects of the

We present the status of the detector as well as the key aspects of the detector performance from the 2011 run. In addition we present prospects for the detector running in 2012 when the LHC will run with higher energy collisions and at higher luminosities.

## for the collaboration

**ATLAS** 

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**Session Classification:** New Detector Systems and Upgrades

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