



**HEP 2013
Stockholm
18-24 July 2013**



Contribution ID: 614

Type: **Poster Presentation**

Operation and Performance of the ATLAS Muon Spectrometer Databases during 2011-12 Data Taking

The size and complexity of the ATLAS experiment at the Large Hadron Collider, including its Muon Spectrometer, raise unprecedented challenges in terms of operation, software model and data management. One of the challenging tasks is the storage of non-event data produced by the calibration and alignment stream processes and by online and offline monitoring frameworks, which can unveil problems in the detector hardware and in the data processing chain. During 2011 and 2012 data taking, the software model and data processing enabled high quality track resolution as a better understanding of the detector performance was developed using the most reliable detector simulation and reconstruction. This work summarises the various aspects of the Muon Spectrometer Databases, with particular emphasis given to the Conditions Databases and their usage in the data analysis. Plans for further developments during the present shutdown, in particular in the detector data quality architecture and database web interfaces, are also presented.

Author: Dr VERDUCCI, Monica (University of Washington (US))

Track Classification: Detector R&D and data handling