

# 21st International Conference on Computing in High Energy and Nuclear Physics (CHEP2015)



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## Status and future evolution of the ATLAS offline software

*Monday, April 13, 2015 4:30 PM (15 minutes)*

The talk will give a summary of the broad spectrum of software upgrade projects to prepare ATLAS for the challenges of the soon coming LHC Run-2. Those projects include the reduction of the CPU required for reconstruction by a factor 3 compared to 2012, which was required to meet the challenges of the expected increase in pileup and the higher data taking rate of up to 1 kHz. As well, the new Integrated Simulation Framework (ISF) has been put into production. By far the most ambitious project is the implementation of a completely new Analysis Model, based on a new ROOT readable reconstruction format xAOD, a reduction framework based on the train model to centrally produce skimmed data samples and an analysis framework. The Data Challenge 2014 has been a first large scale test of most of the foreseen software upgrades. At the end of the talk an overview will be given of future software projects and plans that will lead up to the coming Long Shutdown 2 as the next major ATLAS software upgrade phase.

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