

# ATLAS Physics Analysis Tools

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The physics program at the LHC includes precision tests of the Standard Model (SM), the search for the SM Higgs boson up to 1 TeV, the search for the MSSM Higgs bosons in the entire parameter space, the search for Super Symmetry, sensitivity to alternative scenarios such as compositeness, large extra dimensions, etc. This requires general purpose detectors with excellent performance. ATLAS is one such detectors under construction for the LHC. Data taking is expected to start in April 2007. The detector performance and the prospects for discoveries are studied in various physics and detector performance working groups. The ATLAS offline computing system includes the development of common tools and of a framework for analysis. Such a development consists of studying the different approaches to the analysis domain, in order to identify commonalities, and to propose a baseline unified framework for analysis in collaboration with the various software and computing groups, the physics and detector performance working groups integrating feedback from the user community.

In this talk, we will review the common tools, event data formats for analysis, and the activities toward the Analysis Model.

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