

Project 19/2014: "**Computing for the ATLAS experiment at LHC**"

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Abstract:

The ATLAS experiment is one of two multi-purpose experiments at the LHC designed to record large numbers of proton-proton collision events. The ATLAS collaboration has already published more than 100 journal articles including the celebrated discovery of the Higgs boson.

The simulation, reconstruction and analysis of the ATLAS data are demanding computational tasks, both in terms of the hardware resources required and the complexity of the underlying software systems and services.

We combine in this proposal several distinct computing applications which are of particular interest for the ATLAS groups in the Universe Cluster. These applications cover software development support as well as usage of CPU and storage resources for simulation and data analysis.