

A High Energy Physics Data Analysis Tool

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The presentation will introduce the Ganga job-management system (<http://cern.ch/ganga>), developed as an ATLAS- LHCb common project. The main goal of Ganga is to provide a simple and consistent way of preparing, organising and executing analysis tasks, allowing physicists to concentrate on the algorithmic part without having to worry about technical details.

Ganga provides a clean Python API that reduces and simplifies the work involved in preparing an application, organizing the submission, and gathering results. Technical details of submitting a job to the Grid, for example the preparation of a job-description file, are factored out and taken care of transparently by the systems. By changing the parameter that identifies the execution back-end, a user can trivially switch between running an application on a portable PC, running higher-statistics tests on a local batch system, and analysing all available statistics on the Grid.

Although Ganga is being developed for LHCb and ATLAS, it is not limited to use with HEP applications, and already has several non-HEP users. These include users on projects in bio-medicine, engineering, and (Grid) software testing.