## CMS Monte Carlo Production in the Open Science and LHC Computing Grids

Tuesday 14 February 2006 17:00 (20 minutes)

In preparation for the start of the experiment, CMS must produce large quantities of detailed full-detector simulation. In this presentation we will present the experiencing with running official CMS Monte Carlo simulation on distributed computing resources. We will present the implementation used to generate events using the LHC Computing Grid (LCG-2) resources in Europe, as well as the implementation using the Open Science Grid (OSG) resources in the U.S.. Novel approaches have been deployed that make it possible to run the full CMS production chain on distributed computing resources from the generation of events, to the publication of data for analysis, including all the intermediate steps. The CMS transfer system has been coupled to the LCG production chain to make the tools more robust and significantly improving the performance of the production in LCG. The CMS production has been running on LCG-2 and OSG for several months and an analysis of performance and operational experience will be presented.

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