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Direct exploitation of a top500 supercomputer in the analysis of CMS data.

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The Altamira supercomputer at the Institute of Physics of Cantabria (IFCA) entered in operation in summer 2012.
Its last generation FDR Infiniband network used for message passing in parallel jobs, also supports the connection to General Parallel File System (GPFS) servers, enabling an efficient processing of multiple data demanding jobs at the same time.

Sharing a common GPFS system with the existing GRID clusters at IFCA, and a single LDAP-based identification for users in both systems (supercomputer and local grid), allows CMS researchers to exploit the large instantaneous capacity of this supercomputer to execute analysis jobs.

The detailed experience describing this opportunistic use for skimming and final analysis of CMS 2012 data for an specific physics channel, resulting in a reduction of the waiting time of an order of magnitude, is presented.

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