

ATLAS production and simulation jobs running on HPC facilities

Researchers:

- Santiago González de la Hoz (I.P). [Instituto de Física Corpuscular](#) [1], centro mixto [Universitat de València](#) [2] - [CSIC](#) [3].

Language Undefined

Description:

Proyecto asignado a través de la [Red Española de Supercomputación](#) [4].

We need CPUs to run simulations of the proton-proton collision events in our detector, and supercomputers have spare CPUs. The possible usage of HPC resources by ATLAS is now becoming viable due to the changing nature of these systems and it is also very attractive due to the need for increasing amounts of simulated data. In recent years the architecture of HPC systems has evolved, moving away from specialized monolithic systems, to a more generic linux type platform. This change means that the deployment of non HPC specific codes has become much easier. The timing of this evolution perfectly suits the needs of ATLAS and opens a new window of opportunity. The ATLAS experiment at CERN will begin a period of high luminosity data taking in 2022. This high luminosity phase will be accompanied by a need for increasing amounts of simulated data.

Source URL: <http://www.cenits.es/en/proyectos/atlas-production-and-simulation-jobs-running-hpc-facilities>

Links

[1] <http://webific.ific.uv.es/>

[2] <https://www.uv.es/>

[3] <http://www.csic.es/>

[4] <https://www.res.es/>