Contribution ID: **73**   Type: **Oral**

Evolution of the CMS Global Submission Infrastructure for the HL-LHC Era

Monday 4 November 2019 11:45 (15 minutes)

Efforts in distributed computing of the CMS experiment at the LHC at CERN are now focusing on the functionality required to fulfill the projected needs for the HL-LHC era. Cloud and HPC resources are expected to be dominant relative to resources provided by traditional Grid sites, being also much more diverse and heterogeneous. Handling their special capabilities or limitations and maintaining global flexibility and efficiency, while also operating at scales much higher than the current capacity, are the major challenges being addressed by the CMS Submission Infrastructure team. This contribution will discuss the risks to the stability and scalability of the CMS HTCondor infrastructure extrapolated to such a scenario, thought to be derived mostly from its growing complexity, with multiple Negotiators and schedulers flocking work to multiple federated pools. New mechanisms for enhanced customization and control over resource allocation and usage, mandatory in this future scenario, will be also presented.

Consider for promotion

Yes

Author: PEREZ-CALERO YZQUIERDO, Antonio (Centro de Investigaciones Energéti cas Medioambientales y Tecno)

Presenter: PEREZ-CALERO YZQUIERDO, Antonio (Centro de Investigaciones Energéti cas Medioambientales y Tecno)

Session Classification: Track 3 –Middleware and Distributed Computing

Track Classification: Track 3 –Middleware and Distributed Computing