

## A brief history of distributed computing at the LHC

*Thursday, 22 March 2018 15:00 (30 minutes)*

Since the inception of the MONARC model and of the Grid paradigm at the turn of the millenium, our views on how to organize distributed computing for the LHC experiments has considerably evolved. There have been several generations of tools (Grid middleware) as well as a lot of conceptual and technical developments within the experiments in order to optimize the efficiency of data management and data processing. The rigid MONARC model has evolved towards a more versatile usage of computing resources, and new resource providers have emerged, in particular cloud providers, institutional clusters outside the Grid and volunteer computing.

in this presentation we shall review the main stages of evolution of distributed computing at the LHC during these 18 years and try and give an outlook on the possible further evolution, in view of the upcoming upgrades of the LHC and of the experiments during the next 10 years.

**Primary author:** Dr CHARPENTIER, Philippe (CERN)

**Presenter:** Dr CHARPENTIER, Philippe (CERN)

**Session Classification:** Physics & Engineering Session

**Track Classification:** Physics (including HEP) and Engineering Applications