

# 21st International Conference on Computing in High Energy and Nuclear Physics (CHEP2015)



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## Designing a future Conditions Database based on LHC experience

*Monday, April 13, 2015 2:00 PM (15 minutes)*

The ATLAS and CMS Conditions Database infrastructures have served each of the respective experiments well through LHC Run 1, providing efficient access to a wide variety of conditions information needed in online data taking and offline processing and analysis. During the long shutdown between Run 1 and Run 2, we have taken various measures to improve our systems for Run 2. In some cases, a drastic change was not possible because of the relatively short time scale to prepare for Run 2. In this process, and in the process of comparing to the systems used by other experiments, we realized that for Run 3, we should consider more fundamental changes and possibilities.

We seek changes which would streamline conditions data management, improve monitoring tools, better integrate the use of metadata, incorporate analytics to better understand conditions usage, as well as investigate fundamental changes in the storage technology, which might be more efficient while minimizing maintenance of the data as well as simplify the access to it. This contribution will describe architectures we are evaluating and testing which we think will address the problematic areas while providing improved services.

**Primary authors:** FORMICA, Andrea (CEA/IRFU,Centre d'étude de Saclay Gif-sur-Yvette (FR)); GALLAS, Elizabeth (University of Oxford (GB))

**Co-authors:** Dr PFEIFFER, Andreas (CERN); Dr BARBERIS, Dario (Università e INFN Genova (IT)); GOVI, Giacomo (Fermi National Accelerator Lab. (US)); LEHMANN MIOTTO, Giovanna (CERN)

**Presenter:** FORMICA, Andrea (CEA/IRFU,Centre d'étude de Saclay Gif-sur-Yvette (FR))

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