

Operation of cryogenics for LHC detectors: what did we learn?

Of the different experiments installed in the LHC machine, two detectors, ATLAS and CMS, use dedicated cryogenic equipment.

In this presentation, we will review the availability data for the helium cryogenics of both detectors for the operating years 2011 to 2015 and analyse the different reasons that led to down time.

For the operating year 2015, the availability of the CMS experiment was seriously diminished due to oil carry-over from the cycle compressors to the cold circuits. We will explain the reasons identified for this pollution peak and the modifications done to avoid this occurrence in the future.

We will further list the most noticeable shortfalls we experienced with our cryogenic installations.

Summary

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