

TITLE:

A new schedule for the LHC and its successor

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The LHC will restart in May 2021 and Run 3 will be extended by one year

The CERN Management has presented a new calendar for future accelerator runs to the Council, which met on 12 December. Under the new schedule, the LHC will restart in May 2021, two months after the initially planned date, and Run 3 will be extended by one year, until the end of 2024. All of the equipment needed for the [High-Luminosity LHC](#), the LHC's successor, and its experiments will be installed during Long Shutdown 3, between 2025 and mid-2027. The High-Luminosity LHC is scheduled to come into operation at the end of 2027.

For the last year, extensive upgrades of CERN's accelerator complex and experiments in preparation for the next LHC run and the High-Luminosity LHC have been under way. Major work is being carried out on all the machines and infrastructures: the particle accelerator chain is being entirely renovated as part of the LHC Injectors Upgrade (LIU) project, new equipment is being installed in the LHC, where upgrades are also ongoing, and the experiments are replacing numerous components, even entire subdetectors, in order to prepare for high luminosity (read also about upgrades at [ALICE](#), [ATLAS](#), [CMS](#) and [LHCb](#)).

The High-Luminosity LHC will generate many more collisions than the LHC, accumulating ten times more data than its predecessor throughout its operation. This groundbreaking machine will thus be able to detect extremely rare phenomena and improve the precision of measurements of the infinitesimally small. In order to fully exploit the increased quantity of data, the experiments have embarked upon ambitious detector upgrade programmes. The extra time will enable them to ready themselves for Run 3 and, then, for the High-Luminosity LHC.