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Status and challenges of the Future Circular Hadron Collider FCC-hh

Thursday, 7 July 2022 15:40 (20 minutes)

The Future Circular Collider (FCC) study was launched as a worldwide international collaboration hosted by CERN with the goal of pushing the field to the next energy frontier beyond the LHC. The mass of particles that could be directly produced is increased by almost an order of magnitude, and the subatomic distances to be studied are decreased by the same proportion. FCC covers two accelerators, namely an energy-frontier hadron collider (FCC-hh) and a highest luminosity, high-energy lepton collider (FCC-ee), sharing the same 100 km tunnel infrastructure. This talk focuses on the FCC-hh, summarising its key features such as accelerator design, performance reach, and underlying technologies. The proposed vision is based on the conceptual design report, which represents a milestone of this study but also covers more recent design activities.

In-person participation

Yes

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