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Future Circular Collider : Status and Plans

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The high energy frontier of particle physics is currently being explored by the Large Hadron Collider (LHC), a hadron-hadron collider at CERN near Geneva. It discovered the higgs boson and continues to explore the high energy regime. The European particle physics community has defined a strategy for the future and identified the preparation of a future flagship project as a key priority. Therefore a global collaboration, the Future Circular Collider (FCC) Study, has been formed by many institutes with the support of the European Union and the US. The collaboration is designing a new proton-proton collider with a centre-of-mass energy of 100 TeV, seven times larger than in the LHC. Ion-proton and ion-ion operation is also possible and an option for electron-proton collision can be added. An electron-positron collider could be considered as a first stage, using the same tunnel. A conceptual design report is being finalised this year as input to the European Strategy Process. The presentation will introduce the FCC design and the status of the development.