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## FCC study: parameters and optics for hadron and lepton colliders

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A new international study has just been launched to design a hadron collider with a centre-of-mass energy of the order of 100 TeV in a new 80-100 km tunnel as a long-term goal. The design study includes a 90-350 GeV lepton collider, seen as a potential intermediate step, and an ep option. This paper reports on the overall parameters and preliminary optics designs with special emphasis on the Interaction Regions and the constraints arising for having to host both the lepton and the hadron colliders. Preliminary hardware specifications, as magnetic field, gradient, lengths and aperture are also presented.

### Summary

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