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**Progress towards next generation hadron colliders: FCC-hh, HE-LHC, and SPPC.<sup>1</sup>**

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A higher-energy circular proton collider is generally considered to be the only path available in this century for exploring energy scales well beyond the reach of the Large Hadron Collider (LHC) presently in operation at CERN. In response to the 2013 Update of the European Strategy for Particle Physics and aligned with the 2014 US “P5” recommendations, the international Future Circular Collider (FCC) study, hosted by CERN, is designing such future frontier hadron collider. This so-called FCC-hh will provide proton-proton collisions at a centre-of-mass energy of 100 TeV, with unprecedented luminosity. The FCC-hh energy goal is reached by combining higher-field, 16 T magnets, based on Nb<sub>3</sub>Sn superconductor, and a new 100 km tunnel connected to the LHC complex. In addition to the FCC-hh proper, the FCC study is also exploring the possibility of a High-Energy LHC (HE-LHC), with a centre-of-mass energy of 25-27 TeV, as could be achieved in the existing 27 km LHC tunnel using the FCC-hh magnet technology. A separate design effort centred at IHEP Beijing aims at developing and constructing a similar collider in China, with a smaller circumference of about 54 km, called SPPC. Assuming even higher-field 20 T magnets, by relying on high-temperature superconductor, the SPPC could reach a c.m. energy of about 70 TeV. This presentation will report the motivation and the present status of the R&D for future hadron colliders, a comparison of the three designs under consideration, the major challenges, R&D topics, the international technology programs, and the emerging global collaboration.

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