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## Design Progress for Accelerators of a Super Tau Charm Facility in China

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Based on the key scientific questions in the frontier of particle physics field, the current status and future development trend globally and domestically of accelerator-based particle physics experiments, a Super Tau-Charm Facility (STCF) is proposed by taking into account the advantages in the relevant fields in China. The STCF is a new-generation electron-positron collider facility that has a center-of-mass energy of covering 2 to 7 GeV and a peak luminosity of  $5 \times 10^{34} \text{cm}^{-2} \text{s}^{-1}$  at a center-of-mass energy of 4 GeV. It consists of an accelerator, including double storage rings of circumference approximately 800 meters and a linear injector of length approximately 400 meters, and a particle spectrometer. This paper discussed the key issues of accelerator physics and technologies. Also, the accelerator research progress of the projects are presented.

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### Footnotes

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