## DIS 2014 - XXII. International Workshop on Deep-Inelastic Scattering and Related Subjects



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## LHeC accelerator development

Tuesday, 29 April 2014 14:00 (20 minutes)

The Large Hadron Electron Collider (LHeC) is a proposed facility which will exploit the LHC beams for electron-proton/nucleus scattering, using a new 60 GeV electron accelerator. Following the release of its detailed technical design report in 2012, the configuration of a linac with racetrack shape has been chosen for its default design. Further work has been pursued in order to adapt the electron and high luminosity optics and beam parameters, to achieve performance levels close to  $10^{34}$  cm $^{-2}$  s $^{-1}$  as is desirable for precision Higgs physics with the LHeC. In parallel, work has focused on the design of an LHeC Test Facility at CERN and to validate and prepare the Energy Recovery Linac operation mode for the LHeC and to develop the required Superconducting RF technologies. The talk presents an overview on the design, recent activities and an outlook for further developments.

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