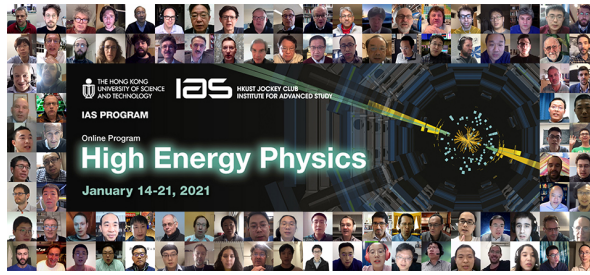


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The Large Hadron-electron Collider (LHeC) is a proposed upgrade of the LHC at CERN. It consists of an ERL providing electrons to collide with the HL-LHC, HE-LHC and the FCC-hh proton beams achieving centre-of-mass energies 1.3-3.5 TeV and luminosities $\sim 10^{34} \text{ cm}^{-2} \text{ s}^{-1}$, respectively. These large energies and luminosities lead to charged current Higgs production cross sections which are comparable (LHeC) or 3-4 times larger (FCC-eh) than those of γ -Higgs-strahlung at e^+e^- colliders. In this talk we present the latest results on the determination of Higgs couplings, both in ep at the LHeC and the FCC-eh, and in combination with their hadronic counterpart HL-LHC, exhibiting a strong $ep + pp$ synergy and very interesting complementarity to e^+e^- Higgs prospects. We also show the implication that a precise determination of PDFs in ep has for precision Higgs measurements at hadron colliders.

Reference: LHeC Collaboration and FCC-he Study Group, P. Agostini et al., e-Print: 2007.14491 [hep-ex].

Scheduling Preferences

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