Prospects for Higgs physics in high-energy ep scattering
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1. LHeC and FCC-he, in ep(A) collisions synchronous with pp(A) running, could deliver fundamentally new insights on the structure of the proton (and nucleus) and the strong coupling $\alpha_S$ with high precision; thus strengthen enormously the HL/HE-LHC physics case for searches [e.g. "On the Relation of the LHeC and the LHC", arXiv:1111.5102].

2. LHeC sensitivity to $H\rightarrow b\bar{b}$ is estimated by an initial simulation study: LHeC has the potential to measure $H\rightarrow b\bar{b}$ coupling with an S/N $\sim 5$ and to 1% accuracy with 60 GeV electron beam based on a luminosity of $10^{30}$ cm$^{-2}$ s$^{-1}$.

3. At LHeC, various Higgs boson decays and Higgs CP eigenstates could be accessed via WW and ZZ fusion at c.m.s. energies of 1.3 TeV and with 1000 fb$^{-1}$ complementary to LHC experiments.

4. There are exiting prospects to measure double Higgs boson production at FCC-he that deserve further detailed studies.

5. New high luminosity and high energy prospects in ep have just started to be explored and open exciting new potential for complementary, precision Higgs physics at the LHC and FCC facilities.

An Accelerator Complex
Higgs Signal vs Backgrounds
SM Higgs production in ep
Total SM Higgs Cross Sections
The Simulation Framework
Higgs Signal and Backgrounds
Precision Partons for LHC and FCC-hh
Weak Mixing Angle Measurements at LHeC and FCC-he