Paper status and new numbers

Lost a bit of time.. Missing:

Final check of WW + cc text

Cosmetics

Final Reading

→ Distribution to Group

Aim to publish asap.

Thinking of moving App (BSM H summary) to full LHeC at HL-LHC paper, as it is an overview on sth which is already published

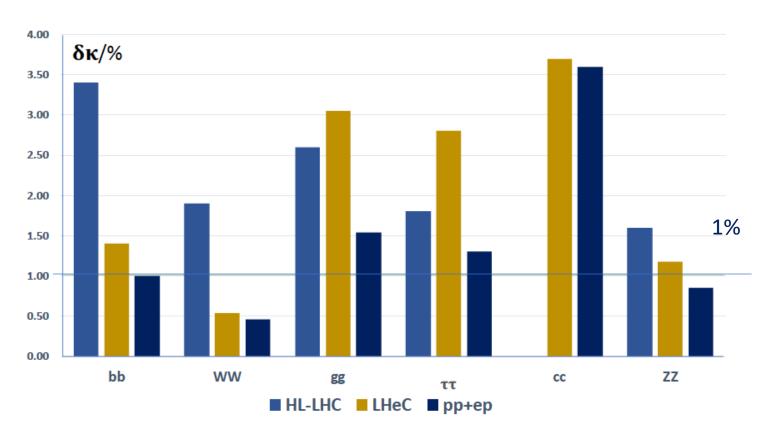
Precision Higgs Physics at High-Energy Electron-Proton Colliders

Contents

1	Introduction LHeC Higgs Study Group	4
2	Higgs in ep 2.1 Electron-Proton Colliders 2.2 Kinematics 2.3 Cross Sections and Rates 2.4 Detector - Acceptance and Resolution	5 6 6
3	Standard Model Higgs Decays in ep 3.1 Higgs Decay into Bottom and Charm Quarks 3.2 Higgs Decay into WW 3.3 Accessing Further Decay Channels 3.4 Systematic and Theoretical Errors	10 11 12 14
4	Higgs Coupling Analyses 4.1 Results on ep 4.2 Determination of Higgs Couplings in pp and ep 4.3 Parton Distributions	17 18 19 19
5	Higgs Decay into Invisible Particles	21
6	Summary	22
7	Appendix: BSM Higgs and non-Higgs Physics in ep	2 4

Higgs in ep and pp [LHeC and HL-LHC]

Determination of SM Higgs couplings jointly from pp + ep



The combined ep+pp at LHC reaches below 1% for dominant channels ep adds charm. Analysis in EFT framework: we need aTGCs +eweak by fall!

Results for FCC-eh at 20 TeV $E_p \times 60$ GeV E_e **Uncertainties on kappa** Decay FCCep HL-LHC bb 0.9 2.7 WW 0.3 1.7 2.2 gg 1.5 1.6 tau CC 0.5 1.0 3.3 1.7 УУ in percent. SM width.