

Precision Top and EW measurements at the LHeC and the FCC-eh

Friday, 31 July 2020 12:25 (25 minutes)

The LHeC and the FCC-eh offer unique prospects for the measurement of EW parameters and top properties in energy frontier, luminous ep scattering. In this talk we will revisit the determination of Z , W and top mass through inclusive measurements, showing the latest results as contained in the 2020 LHeC White Paper. Next, we will show the possibilities for the determination of the vector and axial couplings of light quarks, of the effective weak mixing angle and of PDFs through electroweak interference probing the proton structure. We will discuss also direct W and Z production and the possibilities for determination of anomalous triple couplings. Finally, we will address top physics with the possibilities for precise determinations of the Wtq couplings and competitive FCNC top coupling measurements.

I read the instructions

Secondary track (number)

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