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xFitter Updates: Probing Z Boson Couplings with Forward-Backward Asymmetry

Tuesday 22 August 2023 16:55 (12 minutes)

We present recent updates in the xFitter software framework for global fits of parton distribution functions (PDFs) in high-energy physics. Our focus is on investigating the sensitivity to Z boson couplings using the forward-backward asymmetry in Drell-Yan production. By utilizing an effective approach and simulated data, we assess the accuracy of these couplings, specifically considering the full LHC data sample. Furthermore, we compare our results with predictions for future colliders, providing insights into their potential impact on understanding Z boson interactions.

Collaboration / Activity

xFitter developers

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