

# XXVIII International Workshop on Deep-Inelastic Scattering and Related Subjects



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## Defiducialization: Providing Experimental Measurements for Accurate Fixed-Order Predictions

*Wednesday, 14 April 2021 12:35 (20 minutes)*

An experimental procedure is proposed to perform measurements of differential cross sections which can be compared to fixed-order QCD predictions with improved accuracy. The procedure can be applied to the Drell-Yan cross-section measurements which are differential in the boson transverse momentum. An example analysis is performed using the ATLAS measurement of the Z-boson production cross section at center-of-mass energy of 8 TeV. The resulting full phase space measurement of the cross section differential in the boson rapidity is compared to theoretical predictions computed with next-to-next-to leading-order accuracy in QCD.

(based on Eur. Phys. J. C 80, 875 (2020))

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