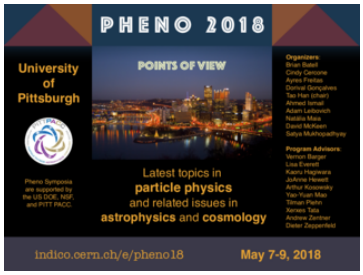

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Interpretation of Angular Distributions of Z-boson Production at Colliders

Tuesday 8 May 2018 17:45 (15 minutes)

High precision data of lepton angular distributions for γ^*/Z production in $p-p$ collision at LHC, covering broad ranges of dilepton's transverse momentum (q_T) and rapidity were reported recently. Strong q_T dependencies were observed for several angular distribution coefficients, A_i, including $A_0 - A_4$. Significant rapidity dependencies were also found for the coefficients A_1, A_3 and A_4, while A_0 and A_2 exhibit very weak rapidity dependence. Using an intuitive approach we show that the q_T and rapidity dependencies of the angular distributions coefficents can be well described. Implications on other hard processes will also be discussed.

Summary

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