



Contribution ID: 314

Type: **not specified**

Electroweak Gauge-Boson and Higgs Production at Small q_T : Infrared Safety from the Collinear Anomaly

Tuesday 27 March 2012 17:10 (20 minutes)

We discuss the differential cross sections for electroweak gauge-boson and Higgs production at small and very small transverse momentum q_T .

Large logarithms are resummed using soft-collinear effective theory.

The collinear anomaly generates a non-perturbative scale q^* , which protects the processes from receiving large long-distance hadronic contributions. A numerical comparison of our predictions with data on the transverse-momentum distribution in Z-boson production at the Tevatron and LHC is given.

Author: WILHELM, Daniel (Mainz U)

Co-authors: NEUBERT, Matthias; BECHER, Thomas (University of Bern)

Presenter: WILHELM, Daniel (Mainz U)

Session Classification: Hadronic final states

Track Classification: Hadronic final states