Contribution ID: **28** Type: **Talk in Parallel Session at DIS2013**

The resummation of the low-phistar domain of Z production

Thursday, 25 April 2013 12:00 (20 minutes)

The presence of large logarithms in QCD corrections to observables spoils the validity of a calculation truncated at finite order and calls for an all-orders approach. The QT spectrum of massive lepton pairs, produced in hadron colliders by the Drell-Yan mechanism, has received a great deal of attention in electroweak phenomenology. We present and discuss a next-to-next-to-leading log (NNLL) resummed calculation of a related observable, namely phistar, that was recently introduced because of its distinct experimental advantages, but which is nonetheless sensitive to similar physics: soft-collinear gluon emission in the initial state. We also present various comparisons to collision data at Tevatron and the LHC.

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Session Classification: WG3: Electroweak and Searches

Track Classification: Electroweak Physics and Beyond the Standard Model