



Contribution ID: 29

Type: **not specified**

## Determination of CCFM uPDF with combined HERA data

*Tuesday 27 March 2012 15:25 (20 minutes)*

We present a new determination of the un-integrated PDF using the combined HERA data. We obtain acceptable  $\chi^2/\text{ndf}$ . We find that for a good description of HERA data the gluon splitting function including non-singular terms as well as kinematic constraints and NLO alphas are necessary. We determine for the first time a full set of uncertainty uPDFs which allow to study the uPDF uncertainty for processes at HERA and the LHC. We also show a comparison of predictions using the new uPDFs with measurements from HERA and the LHC.

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**Session Classification:** Structure functions

**Track Classification:** Structure functions