

XXVIII International Workshop on Deep Inelastic Scattering and Related Subjects



Contribution ID: 256

Type: **Contributed Talk**

The new PDF sets in the MSTW/MMHT framework

Tuesday, 24 March 2020 10:00 (30 minutes)

I will give an update on the latest major PDF update with the MSTW/MMHT framework. The update includes the effects of numerous new data sets, mainly from the LHC. This includes vector boson production, differential in rapidity, mass or p_T , or usually some combination. We also include new jet data and inclusive and differential top pair production data. There have also been improvements in the theoretical framework. The parameterisation has been extended and made more flexible, and more data sets are included without any approximation at NNLO. The PDFs are largely stable compared to MMHT2014, with the major changes being in the detailed breakdown of the quarks and antiquarks into different flavours. A brief discussion of the dependence on the strong coupling and quark masses is included.

Primary author: Prof. THORNE, Robert (University College London)

Co-authors: CRIDGE, Thomas (University College London); Dr HARLAND-LANG, Lucian (University of Oxford); Prof. MARTIN, Alan (Univ. of Durham)

Presenter: Prof. THORNE, Robert (University College London)

Session Classification: Structure function and parton densities

Track Classification: Structure Functions and Parton Densities