

PDF Meeting

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STATEMENTS ...

- > Proton PDFs are THE legacy of HERA and a responsibility for DESY.
 - It should be OUR (DESY, H1, ZEUS, Theory) responsibility to establish HERA PDFs @ LHC.
 - PDF group of the Analysis Centre: help to make THE HERA PDF (sets) reality.
- > TWO PDF results @ DESY from highest, but different expertise!
 - Both are used by only rather limited communities.
 - Combined H1+ZEUS HERA PDFs (currently 1.0); no real intention from the sides of the experiments to go for global fits. Limited usage (due to limited use of data sets).
 - ABKM: theoretically advanced, but not used by LHC experiments (my opinion after discussions with representatives: not foreseen to be used on medium timescale).
- > Need to merge the best of both efforts NOW:
 - Need ONE PDF fit based on ONE effort by experimentalists and (DESY++) theorists!
 - Need new way of collaboration between theory and experiment (a la LEP EWWG)!
 - Need sets from based on only inclusive HERA data to global fit to all world data!
 - Need to promote! Experiments will NOT use what is best, but what is known, promoted, easy-to-use (→ CTEQ, MSTW). And change is veeery slow!

... AND SUGGESTIONS ...

- > ... set up “PDF++ group” including experiments, Alliance PDF group, and DESY LHC group members.
 - Define rules for citation of theorists’ work and for sharing of unpublished data.
- > Get together all tools available NOW and all (HERA) data available NOW and start working on global fits;
 - Merge ABKM and HERA PDF efforts.
 - Think about hiring additional dedicated manpower for implementation and support.
- > Use DESY contacts to ATLAS/CMS to promote new PDFs aggressively:
 - MC coordinators (sample generation – and thus use of PDFs) need their OK).
 - People working on relevant analyses (promotion in LHC working groups).
 - Performing relevant analyses (top, etc.) using (prel.) HERA PDFs.
 - Also get FSP people involved more strongly – they also should have an interest both in the PDF activities and in DESY heritage.
- > Use “Standard Candles” workshop in autumn as platform for this group.
 - Want more concrete planning of this event, and want to be involved.