

## THE ISSUE

R. TANAKA (ATLAS, CONTACTPERSON, HIGGS XS WG):

“For joint efforts on Higgs cross section at LHC among ATLAS, CMS and theory, we would like to fix the SM input parameters so that people can start working.

The main focus now seems to be which value we should use for  $\alpha_s$  and its associated error.(...)

CAN WE EXPECT THAT MSTW, CTEQ AND NNPDF TEAMS COME TO AGREEMENT IN NEAR FUTURE ?

## JOEY'S PROPOSAL

- AGREE ON VALUE OF  $\alpha_s$  & ASSOCIATE UNCERTAINTY
- AGREE ON USAGE OF 90% C.L.
- COMPUTE UNCERTAINTIES BOTH FOR
  - PDF ONLY
  - PDF+ $\alpha_s$
- CALCULATE XSECT WITH MSTW2008 AND CTEQ6.6
- TAKE ENVELOPE OF UNCERTAINTIES

## WHAT WE ALL AGREE UPON

- DECLARE WHICH PARTON SETS ARE CURRENT AND WHICH ARE NOT

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MINIMAL SUGGESTION (Cristinel, Mandy, Max, Sasha)

(AGREE TO DIFFER)

- BRIEFLY DESCRIBE THE FEATURES OF CURRENT SETS
- RECOMMEND THAT EACH PDF SET'S PRESCRIPTION BE USED
- LET THE USERS DECIDE HOW TO DETERMINE UNCERTAINTIES