

NNLO fits of top-quark mass using total, single-differential and double-differential t-tbar+X cross-section data

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We describe the fit of top-quark mass values at NNLO using as input the double-differential distributions on rapidity and invariant mass of t-tbar pairs obtained by the ATLAS and CMS collaborations from unfolding of their experimental data to the parton level, compared to NNLO theory predictions.

We consider different state-of-the-art PDF sets, finding results of the fits compatible among each other within uncertainties.

On the other hand, we observe some tension between the fits to different datasets.

Contribution partly based on [arXiv:2311.05509], plus updates.

I read the instructions above

Yes

Alternate track

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