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Theory developments in PDF determination

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Theory predictions play a crucial role in PDF fitting.
In order to include data for new processes, you need predictions to compare with. To assess the impact of the perturbative series, Standard Model parameters, or other external inputs, different options have to be readily available. Moreover, to do this and other studies, theory have to be recomputed over and over, with a non-negligible computing cost. This limits and delays the overall progresses.

Thus, we are developing a new framework to produce all theory components in a reproducible and fast way. We provide separate building blocks, specifically designed to be part of the whole pipeline, but developed and operating separately, in order to enhance modularity and reusability.

They are released and developed publicly, to serve as many users as possible, and collect their feedback and requests.

Declaration

I certify that I have checked that I am authorised to submit the abstract with the listed co-authors with their current affiliations

Change of Speaker

I understand that change of speaker is allowed provided that no participant gives more than one talk. Otherwise, we will ask the speaker to choose between one or the other abstract to be presented.

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