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EKO and yadism: theory predictions for PDF fitting

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We present EKO and yadism, a new DGLAP evolution and DIS code respectively, able to provide PDF independent operators, for fast predictions evaluation.

They both support a wide range of physics and computational features, with a Python API to access the individual ingredients (e.g. strong coupling evolution), and file based output for a language agnostic consumption of the results. They are both interfaced with a third grid storage library, PineAPPL.

Both projects have been developed as open, modular, and extensible frameworks, encouraging community contributions and inspection.

A first application of the evolution code will be presented, unveiling the intrinsic charm content of the proton.

In-person participation

Yes

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