

# High-performance computing for global fits of parton distributions

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I summarize computational needs for determination of parton distribution functions at (N)NNLO accuracy. Our experience with the latest CT18 global analysis of NNLO PDFs indicates the need for the benchmarked infrastructure for accurate and fast determination of PDFs from QCD data. Reduction of the current PDF uncertainties to meet the targets of the HL-LHC EW precision program and BSM searches will require substantial computing resources and coordination within community. I will discuss some ideas along these lines discussed within the EF06 topical group.

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