XXVI International Workshop on Deep Inelastic Scattering and Related Subjects



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Bayesian perspective on QCD global analysis

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In this talk, we present a dedicated analysis of existing Monte Carlo methods in global QCD analysis. We critically examine the interpretability of uncertainties on extracted quantities, such as parton densities or fragmentation functions against nested sampling and more traditional approaches using Hessian methodology. We discuss how in some cases the inclusion of resampling, partition, and cross-validation of data sets can artificially inflate uncertainties on the fitted distributions.

Primary author: SATO, nobuo (jlab)

Presenter: SATO, nobuo (jlab)

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