XXVI International Workshop on Deep Inelastic Scattering and Related Subjects



Contribution ID: 242

Type: not specified

Bayesian perspective on QCD global analysis

Wednesday 18 April 2018 17:06 (18 minutes)

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)

Session Classification: WG1: Structure Functions and Parton Densities

Track Classification: WG1: Structure Functions and Parton Densities