

DESY CMS - Estimation of improvements in the model-independent FL structure function measurement with HERA and simulated EIC data

At HERA, the FL structure function has been estimated in a model-independent way using inclusive cross sections measured at three different center-of-mass energies. The future Electron-Ion Collider (EIC) will routinely operate with five different center-of-mass energies. In this project, we aim to estimate improvements in the FL measurement by utilizing simulated EIC data, both with and without HERA data. The project includes acquiring proficiency in the Bayesian Analysis Tool (BAT) and the programming language Julia.

Group

FH - CMS

Project Category

B1. Physics Data Analysis and Performance (software-oriented)

Special Qualifications

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