

Phenomenology 2021 Symposium



Contribution ID: 1393

Type: Tools

Tuning Pythia for Forward Physics at the LHC

Monday, 24 May 2021 18:15 (15 minutes)

Lately, interest has grown in forward, high η physics with experiments like FASER and FORMOSA at the LHC. However, particle physics event generators like Pythia have primarily been calibrated to make predictions in the central, low η regions. As such, predictions in the forward region are in tension with current forward physics data. It is imperative to obtain accurate particle productions, to fully utilize these novel forward experiments. In this talk I will discuss the progress we have made to tune Pythia for forward experiments. This tune will provide a practical tool to determine particle production rates in the forward region, and can be used to study neutrino interactions, BSM physics, and cosmic rays.

Summary

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Session Classification: Tools II