Beitrag ID: **184** Typ: **Talk**

Dijet azimuthal correlations in p-p and p-Pb collisions at forward LHC calorimeters

Mittwoch, 29. März 2023 14:40 (20 Minuten)

I am going to present a state-of-the-art computation for the production of forward dijets in proton-proton and proton-lead collisions at the LHC, in rapidity domains covered by the ATLAS calorimeter and the planned FoCal extension of the ALICE detector. We use the small-x improved TMD (ITMD) formalism, together with collinearly improved TMD gluon distributions and full b-space Sudakov resummation, and discuss nonperturbative corrections due to hadronization and showers using the Pythia event generator. We observe that forward dijets in proton-nucleus collisions at moderately low pT are excellent probes of saturation effects, as the Sudakov resummation does not alter the suppression of the cross section.

Experiment/Theory

Theory/Phenomenology

Affiliation

IFJ PAN

Primary author: KUTAK, Krzysztof (IFJ PAN)

Vortragende(r): KUTAK, Krzysztof (IFJ PAN)

Sitzung Einordnung: Parallel: Early-Time Dynamics & nPDFs

Track Klassifizierung: Early time dynamics and nuclear PDFs