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

Wednesday 30 November 2022 16:40 (15 minutes)

We present a state-of-the-art computation for forward dijets in proton-proton and proton-lead collisions at the LHC, using the kinematics of FCal ATLAS calorimeter and the planned FoCal extension of ALICE. We use the small- x improved TMD (iTMD) formalism, together with collinearly improved TMD gluon distributions, full b -space Sudakov resummation and discuss nonperturbative corrections due to hadronization and showers using the Pythia Monte Carlo. We observe that forward dijets in proton-nucleus collisions at moderately low p_T are excellent probes of saturation effects, as the Sudakov resummation does not alter the suppression of the cross section.

Declaration

I certify that I have checked that I am authorised to submit the abstract with the listed co-authors with their current affiliations

Change of Speaker

I understand that change of speaker is allowed provided that no participant gives more than one talk. Otherwise, we will ask the speaker to choose between one or the other abstract to be presented.

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