

# 11th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions



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 Fo-Cal 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  $p_T$  are excellent probes of saturation effects, as the Sudakov resummation does not alter the suppression of the cross section.

### Experiment/Theory

Theory/Phenomenology

### Affiliation

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**Sitzung Einordnung:** Parallel: Early-Time Dynamics & nPDFs

**Track Klassifizierung:** Early time dynamics and nuclear PDFs