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Forward jets and saturation within high energy factorization

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We present three jet cross sections for proton-proton and proton-lead collisions in a situation where one or all of the jets are in the forward region. The calculation is performed using gauge invariant tree-level off-shell matrix elements and unintegrated gluon density with dynamical nonlinear effects allowing for gluon saturation. Since we deal with asymmetric collisions in the fractions of the hadrons momenta we use so called hybrid high-energy factorization, i.e. there is a single off-shell gluon in the partonic hard subprocess. We observe certain effects due to saturation e.g. in the azimuthal decorrelations.

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