XXVIII International Workshop on Deep-Inelastic Scattering and Related Subjects



Contribution ID: 368

Type: Contributed Talk

Prompt photon production in pp scattering: high energy factorization approach

Tuesday, 13 April 2021 09:43 (18 minutes)

In this talk we present the analysis of prompt photon production at the LHC with the kT-factorization approach. We consider two leading partonic channels, qg->q\gamma and gg*->q\bar{q}\gamma and three theoretical schemes known under the acronyms KMR, GBW, CCFM. We find sensitivity of the calculated prompt photon transverse momentum distribution to the gluon transverse momentum distribution. The predictions are compared to precise data from ATLAS and CMS experiments, what allows to differentiate between approaches.

Primary author: STEBEL, Tomasz (Jagiellonian University)

Co-authors: GOLEC-BIERNAT, Krzysztof (Institute of Nuclear Physics PAS); MOTYKA, Leszek (Jagiellonian University)

Presenter: STEBEL, Tomasz (Jagiellonian University)

Session Classification: Small-x, Diffraction and Vector Mesons

Track Classification: Small-x, Diffraction and Vector Mesons