

# Study of prompt photon production at the CERN LHC energies

*lundi 13 septembre 2021 16:02 (1 minute)*

We study the prompt photon production at the CERN LHC energies considering the color dipole approach. We estimate the rapidity and transverse momentum distributions of prompt photon production considering the more recent phenomenological models for the dipole-proton scattering amplitude, which are able to describe the inclusive and exclusive ep HERA data. A comparison between the predictions from distinct models for the dipole cross section is done, which is expected to allow us to improve our understanding of the QCD dynamics and be important at the forward rapidities in pp and pA collisions at the LHC.

**Auteurs principaux:** SAMPAIO DOS SANTOS, Gláuber (Universidade Federal do Rio Grande do Sul); DA SILVEIRA, Gustavo Gil; MACHADO, Magno (IF-UFRGS)

**Orateur:** SAMPAIO DOS SANTOS, Gláuber (Universidade Federal do Rio Grande do Sul)

**Classification de Session:** Poster