Young Scientists Meeting of the CRC TRR 257



Contribution ID: 5 Type: **not specified**

Top-quark pair production with two isolated photons at NLO QCD

Tuesday, October 17, 2023 11:00 AM (30 minutes)

In this talk we present the calculation of NLO QCD corrections to $pp \to t\bar{t}\gamma\gamma$ in the dilepton and lepton+jet decay channel. The top-quark and W-boson decays are performed in the narrow width approximation preserving spin correlations. We discuss the size of NLO QCD corrections at the integrated and differential fiducial level. In addition, we investigate the distribution of photon bremsstrahlung in $t\bar{t}$ production and its decays, as well as the mixed contribution in which photons occur simultaneously in the production and decays of the top-quark pair.

Author: STREMMER, Daniel (RWTH Aachen University)

Presenter: STREMMER, Daniel (RWTH Aachen University)

Session Classification: Young Scientists Talks