Contribution ID: 77 Type: not specified

Two-loop amplitudes for W-boson production in association with two photons at the LHC

Tuesday, 10 September 2024 16:10 (25 minutes)

I will present a computation of two-loop amplitudes contributing to W+2 photon production at the Large Hadron Collider. We adopt a hybrid approach where analytic results are derived for the leading colour contribution while the subleading colour amplitudes are evaluated numerically, both within the finite-field framework. The size of subleading colour contribution is studied, by evaluating the amplitudes on a small set of physical phase-space points.

Primary author: HARTANTO, Heribertus Bayu (Asia Pacific Center for Theoretical Physics)

Presenter: HARTANTO, Heribertus Bayu (Asia Pacific Center for Theoretical Physics)

Session Classification: Electroweak and Higgs Physics, EFT and BSM

Track Classification: Electroweak and Higgs Physics, EFT and BSM