18th MCnet Meeting and MCnetITN3 Mid-Term Review



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Top-quark effects in diphoton production through gluon fusion at NLO in QCD

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We calculated the NLO QCD corrections to diphoton production through gluon fusion at the LHC, including both light quarks and the top quark. The two-loop amplitudes involving the top quark loop are evaluated through numerical methods proposed recently. We found that NLO QCD corrections are large, and the inclusion of top quark affects the results dramatically.

Summary

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