

Quark-Mass Effects in Higgs Production

Tuesday, November 5, 2024 11:50 AM (20 minutes)

We present results for the Higgs production cross section in the gluon-gluon-fusion channel at next-to-next-to-leading order with finite quark masses. While the impact of finite quark masses are power-suppressed, the precision of state-of-the-art theory predictions makes an exact determination of this effect indispensable. With this result, we address one of the leading theory uncertainties of the cross section.

Primary track

Is the speaker a PhD student or post-doc?

Yes - My participation will be fully supported by my research group

Primary authors: ESCHMENT, Felix (RWTH Aachen University); Mr NIGGETIEDT, Marco (Max-Planck-Institut für Physik); Prof. CZAKON, Michal Wiktor (Rheinisch Westfaelische Tech. Hoch. (DE)); PONCELET, Rene (IFJ PAN Krakow); SCHELLENBERGER, Tom (RWTH Aachen)

Presenter: SCHELLENBERGER, Tom (RWTH Aachen)

Session Classification: Precision Higgs measurements and calculations 2 - sal IV

Track Classification: Precision Higgs measurements and calculations