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EINLADUNG

im Rahmen des Teilchenphysikseminars

zum Vortrag

von

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über

"Top mass effects in gluon fusion processes"

Abstract:
Gluon fusion processes are of central importance at the LHC, but suffer from slow convergence of QCD corrections which are difficult to compute because the processes are loop induced. They are therefore commonly treated in the large-mt expansion (LME) which breaks down above the top threshold. I show how LME-based predictions can be improved significantly by contructing Pade approximations which also utilize input from the top threshold $\hat{s}\approx4m_t^2$. The proof of principle is provided by comparison with recent numerical NLO results for Higgs pair production and the method can be applied to other processes and at NNLO.

Zeit: Dienstag, 23.10.2018, **16:15**

Ort: Erwin Schrödinger-Hörsaal, Boltzmanngasse 5, 5. Stock

gez.: A. Hoang, S. Plätzer