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Precision top mass measurement

Wednesday, 17 March 2021 18:40 (20 minutes)

In this talk I will describe our recent work on N^3LL+NNLO resummed prediction for 2-jettiness differential distribution for boosted $t\bar{t}$ pairs produced in e^+e^- collisions calculated in the framework of SCET+(boosted) HQET. The prediction incorporates a precise short distance top mass scheme, such as the MSR scheme. Renormalon subtractions in the mass and soft function play a key role in improving the stability of the peak position, and the allow for determination of the top MSR mass with perturbative uncertainties well below 100 MeV. The result has important application for Monte Carlo top mass calibration.

Time Zone

Europe/Africa/Middle East

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