



Tuesday, 21 January 2014 at 15:45 (note special time)
Seminar room 0815, 8th floor, physics highrise

Electroweak corrections to $Z + 2$ jets production at the LHC

Ansgar Denner

WÜRZBURG UNIVERSITY

Abstract

We report on a calculation of the next-to-leading order corrections of $\mathcal{O}(\alpha_s^2\alpha^3)$ to the hadronic production of two oppositely charged leptons and two hard jets $pp \rightarrow l^-l^+jj$. The calculation has been performed with the recursive amplitude generator RECOLA and the tensor integral-library COLLIER and includes all EW and QCD corrections at the given order. We provide detailed predictions for the LHC. While the corrections are small for the total cross-section, we find significant distortions of differential distributions.