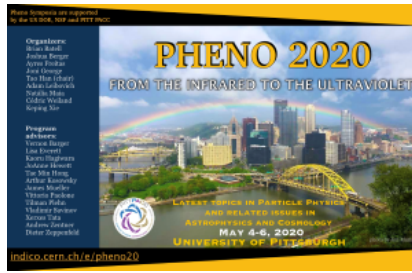


# Phenomenology 2020 Symposium



Contribution ID: 995

Type: **Parallel Talk**

# Master Integrals for the mixed EW-QCD corrections to the Drell-Yan production of a massive lepton pair

Monday 4 May 2020 14:45 (15 minutes)

We present the calculation of the master integrals needed for the two loop mixed QCD-Electroweak virtual corrections to the neutral current Drell-Yan processes ( $q\bar{q} \rightarrow l^+l^-$ ). The dependence on the lepton mass is expanded such that potentially large logarithmic contributions are kept. Finally, the canonical master integrals are given as a Taylor series around four space-time dimensions with coefficients given in terms of generalized polylogarithms up to weight four.

## Summary

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**Session Classification:** QCD & EW I

**Track Classification:** QCD & Electroweak