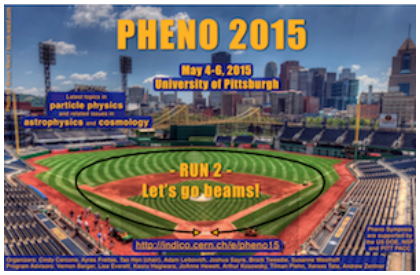

Contribution ID: **52** Type: **parallel talk**

Electroweak Corrections to Vector Boson + b-jet Production

Tuesday 5 May 2015 17:00 (15 minutes)

A precise determination of V+b processes (V=Z, photon) at hadron colliders opens the possibility of measuring the b-quark PDF at the LHC. In this context, we have computed the one-loop electroweak (EW) corrections for the production of a b-jet in association with a Z boson in hadronic collisions. In the interest of accuracy and future developments, we retain the b-quark mass both in the initial and final states. For a comprehensive phenomenological
study, we compare EW and QCD corrections under the same assumptions, and we estimate the residual level of theoretical systematic uncertainty.

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