

Standard Model PDFs for muon colliders

Collinear radiation emitted from high-energy leptons can be resummed by solving the corresponding DGLAP equations, resulting in parton distribution functions (PDFs) for leptons. When going above the EW scale, all SM interactions should be considered and the inclusion of EW interactions bring several novel features that are not present in QCD PDFs of a proton. In this talk I will discuss our implementation for such PDFs for multi-TeV muon colliders, and some interesting aspects.

Primary author: MARZOCCA, David (INFN Trieste)

Presenter: MARZOCCA, David (INFN Trieste)

Session Classification: Colliders, machine learning

Track Classification: Collider Physics and Machine Learning