

Drell Yan pT resolution at low pT

We will study the limits on the resolution of the DY pT at very small pT, using CERN open data. We will first focus on the muon pT resolution as main source of smearing of the DY pT at small pT. We will also study the DY pT spectrum at low DY mass as a way of improving the muon pT resolution. The work will be done primarily using python jupyter notebooks that will then be released as tutorials.

Physics / Computing/ Engineering Content of the project :
Physics: DY measurement at the LHC, data analysis.

Computing: Basic knowledge of Linux is welcome, as well as some basic knowledge of C++/python

Supervisors:

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Field

B1: Particle physics analysis (software-oriented)

DESY Place

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Special Qualifications:

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