

Completion and documentation of a public Open Data analysis example combining CMS and ATLAS Higgs->four lepton signals in the the context of PUNCH4NFDI

Open Data analysis examples in High energy physics are so far available in simplified approaches for educational purposes, or at research level in dedicated technically rather demanding environments.

Recently an example has been set up successfully within the PUNCH4NFDI project, compiling a significant Higgs->4L signal peak reminiscent of the original discovery, which combines public data from CMS and ATLAS at research analysis level using a common simplified format. A few recently newly available datasets should be added, the example needs to be finally streamlined, and documentation will be completed and integrated into the PUNCH4NFDI portal in a form that makes it easy for outsiders to reproduce it.

The output is expected to be a fully working and documented PUNCH usecase example that can be released to the public.

Field

B1: Particle physics analysis (software-oriented)

DESY Place

Hamburg

DESY Division

FH

DESY Group

CMS (with PUNCH)

Special Qualifications:

Some preknowledge in particle physics and/or computing would be helpful.

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