Contribution ID: 20 Type: not specified

Exploratory study for the combined analysis of particle physics and astroparticle physics data in the context of PUNCH4NFDI

Recently combined analysis of data from different High Energy Physics experiments in a common basic research level data format has started to be achieved in the context of the PUNCH4NFDI initiative.

In this exploratory study the concept will be extended to include data from an Astroparticle Physics experiment. In particular, public cosmic air shower data from the Karlsruhe air shower array KCDC will be compared to proton-proton and heavy ion collision data of the CMS experiment. Both the further technical design of the common data format as well as ideas how to relate the physics between the two experiments will be part of the project.

Field

C1: Astroparticle physics analysis and observations

DESY Place

Hamburg

DESY Division

FH

DESY Group

CMS (with KCDC)

Special Qualifications:

 $Some\ preknowledge\ in\ (Astro) Particle\ Physics\ and/or\ Computing\ would\ be\ helpful.$

Primary author: GEISER, Achim (CMS (CMS Fachgruppe QCD))