VHE common data format

Sept 29th, 2021

HESS & DL3 format: status

- First public data release of H.E.S.S. DL3 data following gadf v0.2 specifications

- Exporters exist for all data processing chains
  - Largely rely on heritage code
  - Some rely on data and MC export to DL2 (runwise simulation)

- Large fraction of the data is available in DL3 format within H.E.S.S. collaboration for several configurations and data processing chains
  - so far only in full containment

- Already used in 2 published papers and in several papers in preparation
  - Note: HESS-HAWC paper uses DL4 format (with gadf skymap format)

HESS & VHE data format: plans

- Gammapy recently adopted as an official tool for H.E.S.S. analysis

- Adaptation of one the chains to fully rely on FITS data and Gammapy

- On-going effort to prepare legacy H.E.S.S. DL3 data
  - Need a stable DL3 format specification
  - Not yet satisfactory in terms of metadata / provenance
  - Need data quality info / documentation

- Also need high level data (DL5-6) data formats specifications for archive purposes