Prototype Open Event Reconstruction Pipeline for the Cherenkov Telescope Array

CTA will be the next generation, ground-based and first open gamma-ray observatory, currently under construction.

We present the current state of the software used to process the low-level data of CTA into scientific data products needed by science users, including reconstructed event lists and instrumental response functions (IRFs).

The three python packages ctapipe, pyirf and protopipe offer an open-source solution for the event reconstruction and IRF calculation pipeline for Imaging Air Cherenkov Telescopes, available on github at https://github.com/cta-observatory.

The packages are already widely used inside and outside CTA, first analysis results are presented in multiple contributions at this conference, e. g. (395, 560, 710, 272)

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