## Workshop on Open-Source Software Lifecycles



ID de Contribution: 2

Type: Pitch

## The joint-crab project: Towards open and reproducible multi-instrument analysis in gamma-ray astronomy

lundi 27 juillet 2020 10:10 (5 minutes)

The joint-crab project represents the first multi-instrument, fully-reproducible analysis in gamma-ray astronomy.

A common data format proposed for high-level gamma-ray instruments data is implemented for a small set of Fermi-LAT, MAGIC, VERITAS, FACT, and H.E.S.S observations.

The data were analysed with the open-source software gammapy to produce a joint maximum likelihood fit of the Crab nebula spectrum.

All the results presented in this work are obtained using open-access on-line assets that allow for a long-term reproducibility of the results (Docker, zenodo).

Orateur: NIGRO, Cosimo (IFAE)

Classification de Session: Software Pitches