



gammapy

An open-source **Python** package
for **gamma-ray** astronomy

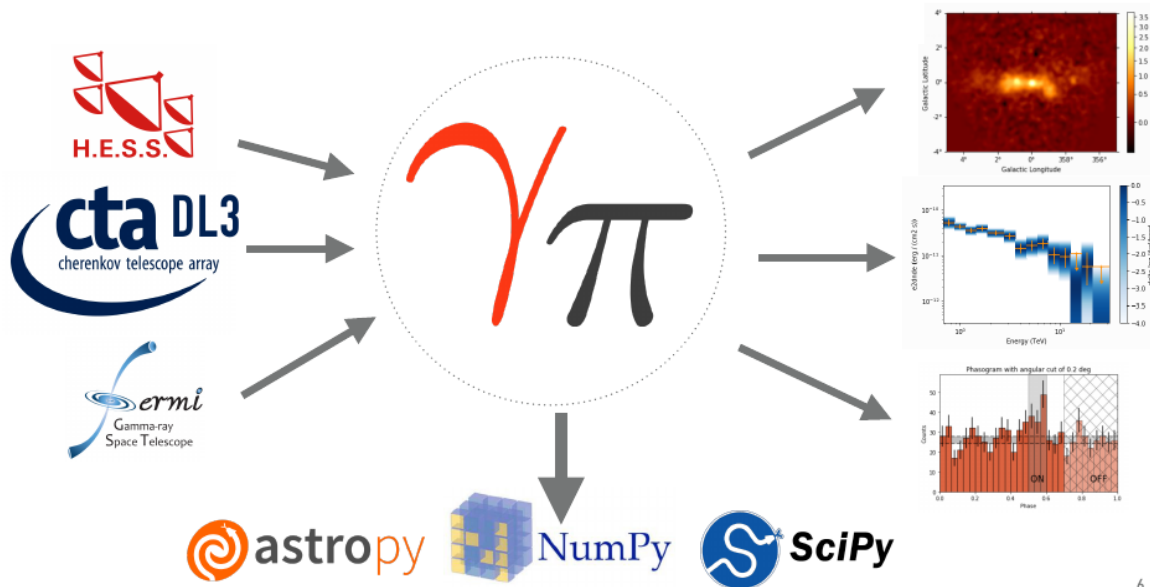
General user call – October 26th, 2020

B. Khélifi, on behalf of the gammapy Coordination Committee



A Science Tools package

- Python package aiming to produce HE/VHE astrophysical products



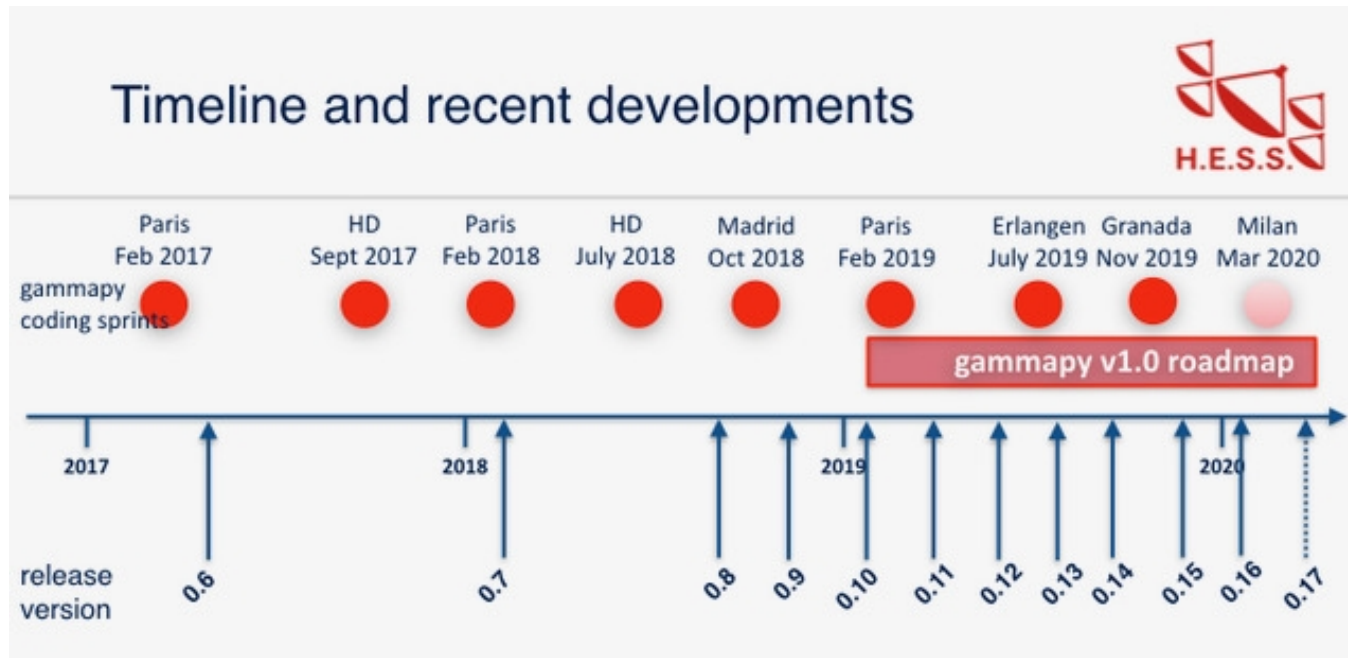
<https://gammapy.org>

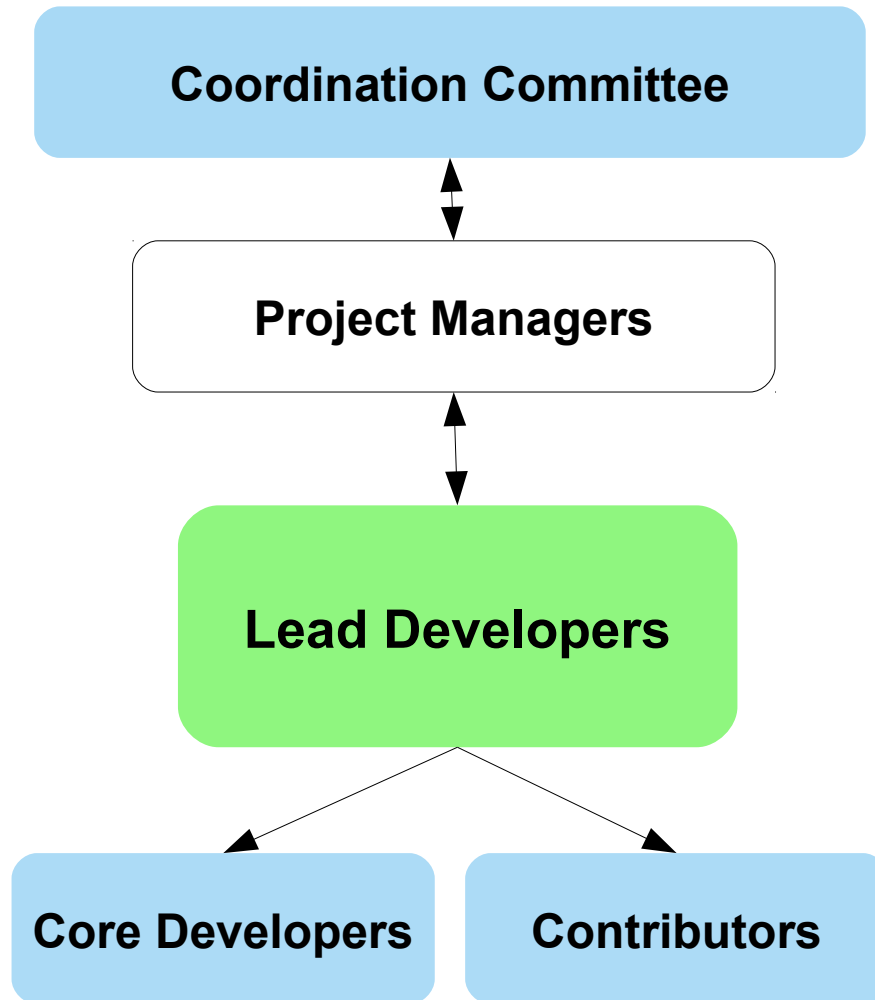
- gammapy** is proposed to the CTA Observatory to be its official Science Tools package



The genesis

- From H.E.S.S. to MWL/MM data analysis





B. Khelifi



C. van Eldik



A. Donath

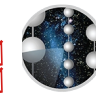


R. Terrier



Towards MWL/MM joint analysis

- Joint analysis of *reduced high-level data* allow better statistical constraints, and the treatment of (relative) systematics uncertainties is possible
 - No more use of ‘flux points’, computed by using pre-defined spectral shape
 - Use of the spatial information from different instruments
 - Data without a significant detection are used and bring statistical constraints
- The *software design* of gammapy permits joint analysis, ie multi-wavelength and multi-messenger astronomy
 - First tests already made with Fermi-LAT/HESS/MAGIC/VERITAS/FACT/, HESS/HAWC, HESS/Chandra, CTA/Km3Net
- The Coordination Committee wishes to open the project to the whole HE/VHE community

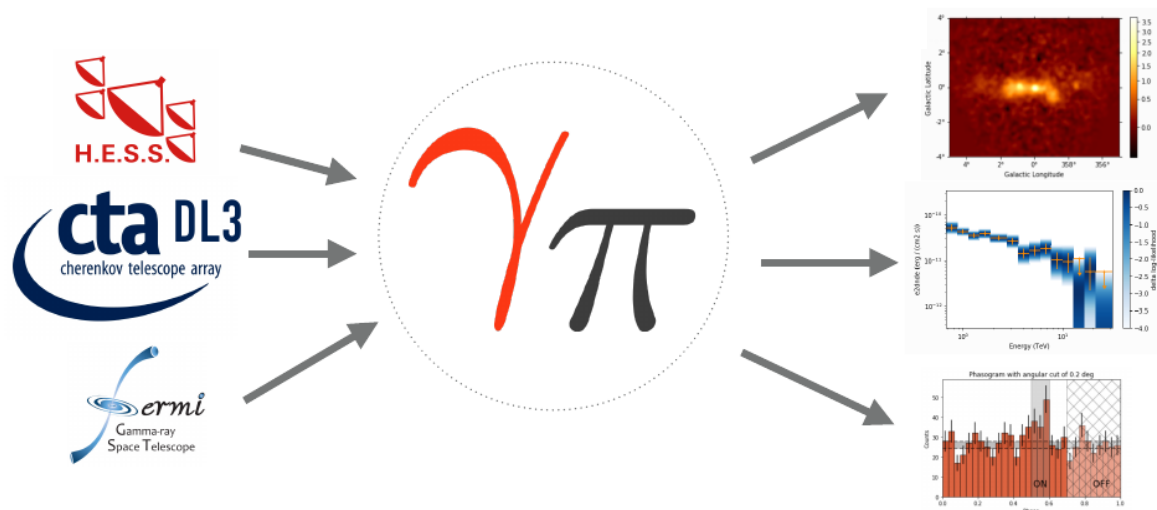


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Meeting agenda



Gammapy - a Python package for (not-only) γ -ray astronomy
A. Donath (MPIK, Heidelberg)

Input data formats for gammapy: DL3 and beyond
R. Terrier (APC, Paris)

Joint analysis of the Crab nebula
C. Nigro (IFAE, Barcelona)