

## Gammapy - A Python Package for Gamma-Ray Astronomy

*Wednesday 20 March 2019 15:15 (45 minutes)*

Gammapy is a community-developed, open-source Python package for gamma-ray astronomy and prototype software for the Cherenkov Telescope Array (CTA) science tools. It is built on Numpy, Scipy and Astropy as core dependencies and uses open, FITS based data formats. The development of Gammapy started ~5 years ago as a loose collection of Python library code, used for the analysis of H.E.S.S. Galactic Plane Survey data. Since this time, the range of features as well as the number of contributors and users has grown considerably. Up to now Gammapy has reached the status of alpha software and has been successfully used for first science publications and analysis of simulated CTA data. However, before Gammapy can be proposed as a complete solution for the future CTA science tools, required features have to be added and a more stable and uniform API has to be developed. In my contribution to PyGamma19 I will present in detail the current status of the package on behalf of the Gammapy team and our proposed roadmap towards a Gammapy 1.0 release. I will also share our past development experiences, present current challenges we are faced with and outline future ideas to continue the collaboration with other astronomical Python based software projects.

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