

Ten years of Gammapy: open source tools for gamma-ray astronomy

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The Gammapy library is an open-source framework designed for gamma-ray astronomy data analysis. Built on scientific Python ecosystem and leveraging open data formats, Gammapy offers a uniform platform for reducing and modeling data from different gamma-ray instruments. It greatly facilitates interoperability between observatories, enabling comprehensive joint analyses. Initiated in 2014 as a toolbox for TeV analysis, Gammapy has evolved, over the past decade, into a robust and versatile tool with a growing community of users, and is now the basis of the CTAO science analysis tools.

We first give an overview of the project history, highlighting its significant milestones and achievements as well as its current status. We then present the main concepts and features of the library, and expose the variety of scientific use cases it supports. Finally, we discuss the future perspectives and planned developments to further enhance the library's functionalities and improve its performance. Gammapy highlights the importance of open-source collaboration in the gamma-ray astronomy community and beyond.

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