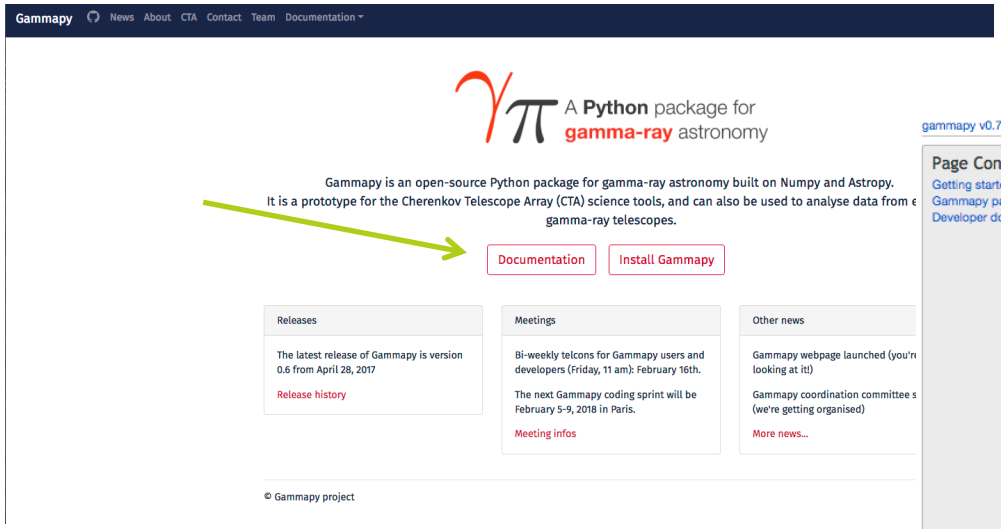
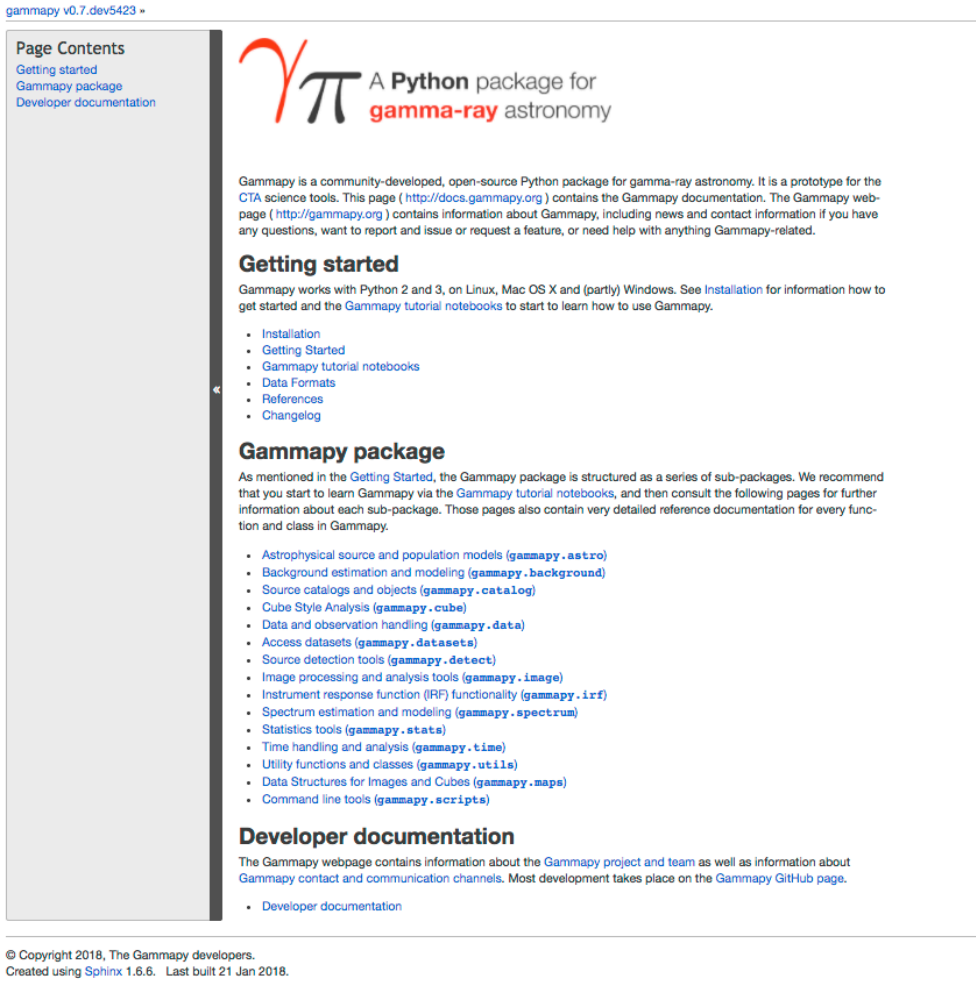
Documentation

Roberta

Where to find it?



- http://docs.gammapy.org/dev/



Kinds of documentation

- Sub-package documentation:
  - Introduction
  - Getting started
  - Examples
  - API documentation
- Notebook tutorials

Notebooks

For a quick introduction to Gammapy, go here:

- First steps with Gammapy | *first_steps.ipynb*

Interested to do a first analysis of simulated CTA data?

- CTA first data challenge (1DC) with Gammapy | *cta_1dc_introduction.ipynb*
- CTA data analysis with Gammapy | *cta_data_analysis.ipynb*

To learn how to work with gamma-ray data with Gammapy:

- IACT DL3 data with Gammapy (H.E.S.S data example) | *data_iact.ipynb*
- Fermi-LAT data with Gammapy (Fermi-LAT data example) | *data_fermi_lat.ipynb*

2-dimensional sky image analysis:

- Image analysis with Gammapy (run pipeline) (H.E.S.S. data example) | *image_pipe.ipynb*
- Image analysis with Gammapy (individual steps) (H.E.S.S. data example) | *image_analysis.ipynb*
- Source detection with Gammapy (Fermi-LAT data example) | *detect_ts.ipynb*
- CTA 2D source fitting with Sherpa | *image_fitting_with_sherpa.ipynb*

1-dimensional spectral analysis:

- Spectral models in Gammapy | *spectrum_models.ipynb*
- Spectral analysis with Gammapy (run pipeline) (H.E.S.S. data example) | *spectrum_pipe.ipynb*
- Spectral analysis with Gammapy (individual steps) (H.E.S.S. data example) | *spectrum_analysis.ipynb*
- Spectrum simulation and fitting (CTA data example with AGN / EBL) | *cta_simulation.ipynb*
- Fitting gammapy spectra with sherpa | *spectrum_fitting_with_sherpa.ipynb*
- Flux point fitting with Gammapy | *sed_fitting_gammacat_fermi.ipynb*

3-dimensional cube analysis:

- Cube analysis with Gammapy (part 1) (compute cubes and mean PSF / EDISP) | *cube_analysis_part1.ipynb*
- Cube analysis with Gammapy (part 2) (likelihood fit) | *cube_analysis_part2.ipynb*

Time-related analysis:

- Light curve estimation with Gammapy | *light_curve.ipynb*

Extra topics

These notebooks contain examples on some more specialised functionality in Gammapy.

Most users will not need them. It doesn't make much sense that you read through all of them, but maybe browse the list and see if there's something that could be interesting for your work (or contribute to Gammapy if something is missing!).

- Template background model production with Gammapy | *background_model.ipynb*
- Continuous wavelet transform on gamma-ray images | *cwt.ipynb*
- Interpolation using the NDDataArray class | *nddata_demo.ipynb*
- Rapid introduction on using numpy, scipy, matplotlib | *using_numpy.ipynb*

Restructuration

- Global restructure needed
  - Many duplications
  - Often not reader friendly
  - If you want to take part in this service work, drop me an email (Roberta.Zanin@mpi-hd.mpg.de)
- In few months from now
  - First prioritizing the building blocks development
  - Call around March/April?

This does not prevent you from commit your new notebooks