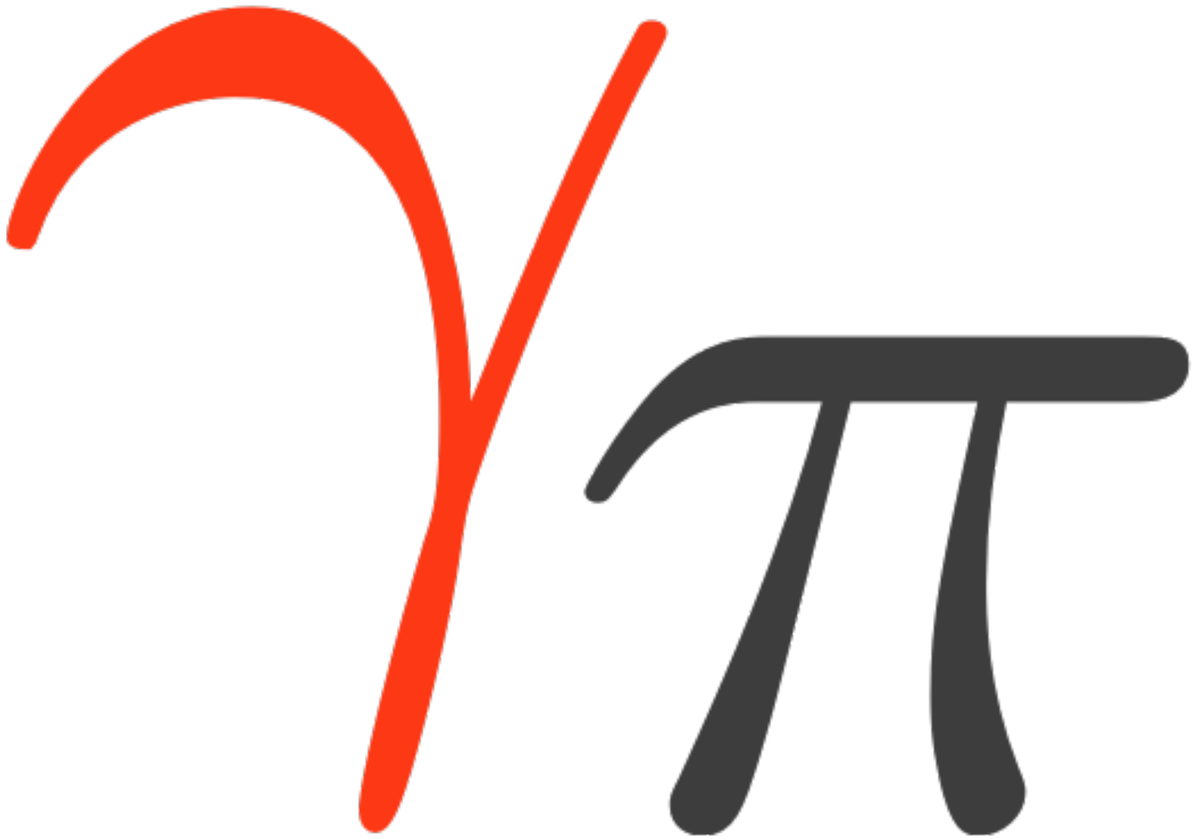


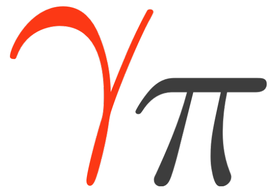
Intro 2nd Gammapy Co-Working Week 2020

Axel Donath - Nov 23rd, 2020

Overview

- In July I said: ~~chances are good we can have an in-person coding sprint in autumn this year~~ **Maybe next year?**
- Co-working week: the idea is all **participants dedicate most of the time to work on Gammapy this week** and make sure they are available for spontaneous discussions on **Slack and remote meetings via Zoom**
- Meeting page: https://github.com/gammapy/gammapy-meetings/tree/master/coding-sprints/2020-11-Co-Working-Week
- Changed to Zoom: more stable, possibility of breakout sessions, overall better user experience
- Planned meetings:
  - Starting tomorrow: everyday at **10am to start the day and 5pm to summarise / conclude the work**
  - Thursday **10am**: “group photo” (screenshot…)
- Slack channels to use: #co-working-week-2020 and #dev (gammapy.slack.com)
- (Remote) pair-coding recommended!

Status



- Gammapy v0.18 was supposed to be the version with the “final” API. We made **a lot of progress** in this direction, **but we are not there yet**…
- **Some remaining API related changes** (require some discussion but can all be **resolved & decided this week!**), such as resolve code duplication SpectrumDataset / MapDataset, **Estimator unification / unified result object** (**Régis’ presentation**). These API breaking changes should be delivered as v0.19 or possibly v1.0.rc as soon as possible
- As we started to do bug-fix releases (especially after v1.0…), we should simplify the release process and setup (**José Enrique’s presentation**)
- Incorporate user feedback for v1.0 (**Atreyee’s presentation,** on Wednesday) and feedback from GPS analysis (**Quentin’s presentation**)
- Incorporate feedback from new user bases and explore new use-cases (non-critical for v1.0):
  - HAWC data analysis (**Laura’s presentation**)
  - Realtime analysis (**Valentina’s presentation**)
- Biggest remaining work is still **documentation**: needs to be finished, overview pages, sub-package RST pages. In many cases deleting old outdated pages / information will help, will continue over the coming weeks
- More detailed work plan, discussion topics and coding projects are on the meeting page (discuss later…)

The v0.18 release…

- For the v0.18 release (mostly I) tried to push and rush a bit, this partly worked, but required two more bug-fix releases, to fix bugs which slipped trough the tests or code review…

- What to learn from this?

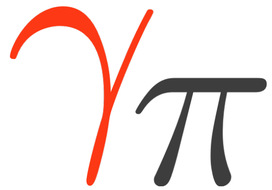
  - Bigger changes (background model handling etc.) came late (mostly my fault…). Introduce a “feature freeze” ~1 week before the release and spend more time testing on scripts and validation

  - Our test coverage is 93%, however it seems our test are not yet sensitive enough. Implement “regression” test based on the reported fails…in a sense we don’t need more tests, but just better tests.

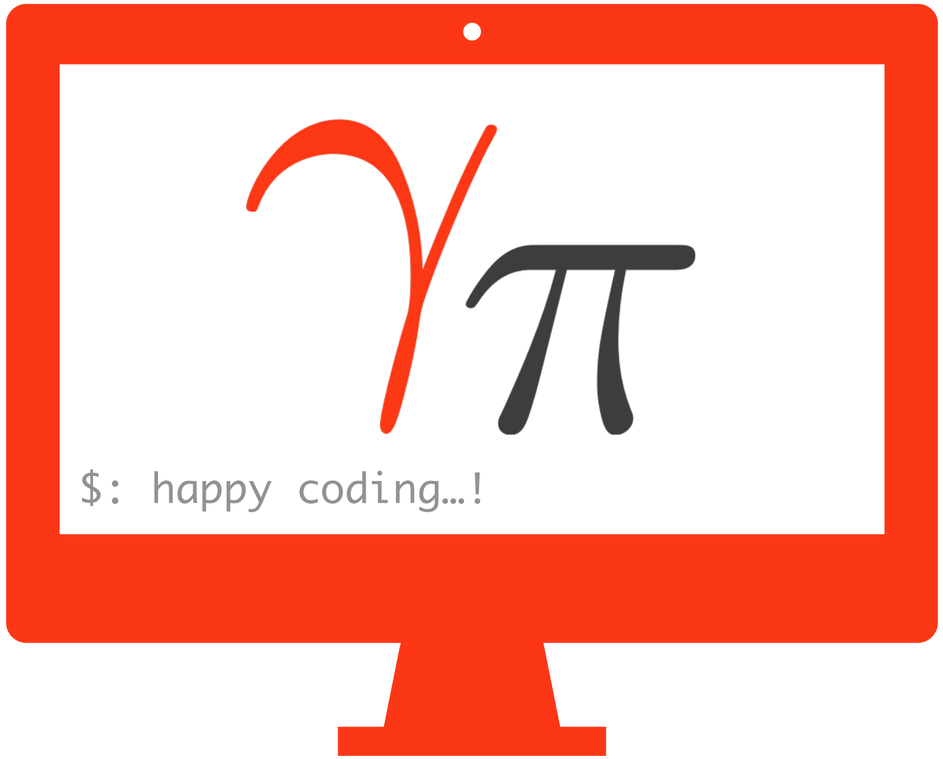
  - Doing bugfix releases was probably a good idea, however we should simplify a bit the release process and possibly implement a “release pipeline”, to make a release with the “press of a button”

  - Anything else?

Priorities



- Finish API breaking changes
- Improve and cleanup documentation
- Improve and simplify release workflow
- Incorporate user feedback
- Add minor new features, e.g. to better support HAWC, real time or ASTRI analysis. But avoid https://en.wikipedia.org/wiki/Feature_creep!
- Writing the paper… https://github.com/gammapy/gammapy-paper


$: happy coding…!