Q & A (Monday, July 26 2021)

Q. I would like a tutorial on lightcurve()! I know we did a light curve without using this week 2?

A. We are working on this. In the meantime, there is an user-contributed perl script called like_lc.pl where you can generate a binned or unbinned lightcurve and see necessary steps https://fermi.gsfc.nasa.gov/ssc/data/analysis/user/

Q. This documentation: https://fermipy.readthedocs.io/en/latest/config.html has `edisp_bins : -1` and `edisp_disable : ['isodiff','galdiff']`. The config file from week 2 has `edisp_bins : -1` and `edisp_disable : ['isodiff']`. Any advice on how we choose? (2/2) Thanks!?

A. For 4FGL and gll_iem_v07.fits, `edisp_bins : -1` and `edisp_disable : ['isodiff']` should be used. For older diffuse models, `edisp_bins : -1` and `edisp_disable : ['isodiff', 'galdiff']`

Q. How can we make an unbinned analysis if fermipy does not support it?

A. From the command line, there is an analysis thread https://fermi.gsfc.nasa.gov/ssc/data/analysis/scitools/likelihood_tutorial.html

In python, please follow

https://fermi.gsfc.nasa.gov/ssc/data/analysis/scitools/python_tutorial.html

Q. Do you have any comments on galaxy clusters in gamma rays. Because there are not many studies on the same.?

A. An actual detection looks promising, but it is very hard to achieve given the spatial extension and distance to most galaxy clusters. There are a number of scientists working on this topic and trying to think of new ways to make a discovery. Maybe there will be a significant detection in the future.

Q. I wish we had gone into more detail in the lecture part of the GRBtools about GRBs, especially since my group didn't get anywhere with the example?

A. There might be more dedicated lectures on certain topics in the future. Stay tuned.

O. Do *all* released versions of fermipy have this issue with lightcurve()?

A. Certain older versions with python 2.7 do not have this issue.

Q. Are the office hours for this week or next?

A. The timeline is still being worked out. We will send out more information soon.