# PACS Photometer: Photometry and Errors Estimate

Hands-on

NOTE: data are on the webdav in : /PACS/data/photometer/First-Hands-on

## Exercise 1:

- download from the webday the file: SH104\_1342219041.tgz
- unzip/untar it
- injest the data in HIPE (hint: use Navigator or getObservation)
- explore the content: observation summary; product levels; visualization

### Exercise 2:

- download from the webdav the files: level2\_red\_alpha\_boo.fits.gz/ level2\_blue\_alpha\_boo.fits.gz
- unzip the files
- now open the HIPE script:
  - → L3\_pointSourceAperturePhotometry\_workshop.py

PACS/scripts/photometer/First-Hands-on

- edit line 181: enter the path where your .fits are located on your computer
- on the same line, at the end of the directory path, enter the name of the file you want to use for doing aperture photometry
- edit line 184: enter the path of the directory where you want the output "statistics file" to be stored
- now run the script...

### Exercise 3:

- download from the webdav the files: level2\_red\_Abell370.fits and PEP\_Abell370\_min\_catalog.txt
- unzip the .fits file
- now open the HIPE script:
  - → L3\_multiplePointSourceAperturePhotometry\_workshop.py

PACS/scripts/photometer/First-Hands-on

- edit line 184: enter the path where your .fits is located on your computer
- now run the script...
- the script, as it is, produces only 1 .png file (for the last source in the catalog). Modify the script to allow it to produce 1 .png for every source

#### Exercise 4:

- download from the webdav the file: alpha\_boo\_2scans.tar
- untar the file
- now open the HIPE script:
  - > scanmap\_pointsources\_PhotProject\_workshop.py in

PACS/scripts/photometer/First-Hands-on

- edit line 154: enter the path where you want to save the results of the processing
- Edit line 198: enter path where you untarred the file
- now run the script...
- inspect the result