

## Exercise (AY 119 BPP 2020)

### A

- ❖ Download the data associated with this lecture from the AY119 site (dsfp\_ztf\_feats.npy)
- ❖ Create dir AY119 and AY119/data on google drive and place the above file there
- ❖ Log in to Colab
- ❖ Create an empty notebook
- ❖ Link your google drive with it
  - *from google.colab import drive*
  - *drive.mount('/content/drive')*
- ❖ Link the dataset
  - *import sys*
  - *datapath = '/content/drive/My Drive/AY119/data/dsfp\_ztf\_feats.npy'*
  - *sys.path.insert(1, datapath)*
- ❖ Load the dataset
  - *Import numpy as np*
  - *feats = np.load(datapath)*
  - *COL\_NAMES = ['diffmaglim', 'magpsf', 'sigmapsf', 'chipsf', 'magap', 'sigmagap', 'distnr', 'magnr', 'sigmagnr', 'chir', 'sharpnr', 'sky', 'magdiff', 'fwhm', 'classtar', 'mindtoedge', 'magfromlim', 'seeratio', 'aimage', 'bimage', 'aimagerat', 'bimagerat', 'elong', 'nneg', 'nbad', 'ssdistnr', 'ssmagnr', 'sumrat', 'magapbig', 'sigmagapbig', 'ndethist', 'ncovhist', 'jdstarthist', 'jdendhist', 'scorr', 'label']*
  - *(attach them to the npy array or pandas dataframe)*
- ❖ Create a simple plot using the data
  - Use matplotlib.pyplot to do the x-y plots.

### B

- ❖ Create a private Git repo
- ❖ Invite a colleague/friend to join with their Git handle
- ❖ Upload the colab to GitHub
- ❖ Verify that you can see the notebook and the plot there
- ❖ Comment the code
- ❖ Write some simple test
- ❖ Download the new version
- ❖ Add axis labels to the plot
- ❖ Upload again
- ❖ Overall verify the cycle to make changes

Send a plot or two with labels and axes.