

1 Radio astronomy observation basics

In the meeting on Saturday Jun 17th, We discussed the basics of conducting radio observations with both single dish telescopes and interferometers. The slides to the talk and the video recordings are available in the Week_5 directory in the Google drive. Please go through the slides and let us know if you have any questions. Refer to chapters 4, 5 and 6 of our textbook for more details.

2 Activities

2.1 Imaging TW Hydra

In this activity, we will try to use what we learnt in the talk to image the protoplanetary disk [TW Hydra](#). The data which will be used for this task was obtained from the interferometer Atacama Large Millimeter Array ([ALMA](#)).

Tasks:

- The imaging will be carried out in CASA. Please use the following link to download the data and go through the instructions to image the source of interest : https://casaguides.nrao.edu/index.php?title=First_Look_at_Imaging_CASA_6.4.
- Once you are done with the imaging process, look into the CASA tasks `imstat` and `imfit`. These tasks help you to calculate the RMS and flux density of a source in the image. Try to calculate the flux density and the error in the flux density. You can reach out on Slack if you are stuck with this.

At a later day during this coming week, we'll meet to have a demo session on the calibration procedure. Following that calibration process, we will be imaging the calibrated data that we get from that to apply what we learn in the above activity.

never happened.
they discussed imfit
and imstat instead

