astro8404: Radio Interferometry - Methods and Science

Milestone 2

deadline: 19 June 2017 23:59 CEST

Tasks:

Calibrate the measurement set following the instructions from tutorials I-IV:

1. *A priori* calibration
2. Bandpass calibration
3. Flux & Phase calibration

Hint: fluxes for your flux calibrator model can be found at https://almascience.eso.org/alma-data/calibrator-catalogue

Deliverables:

1. **Calibration script**
   provide us with your ***commented*** calibration script.

2. Write a **short report** (pdf, 1-2 pages excluding figures) on the different calibration steps. The purpose of each calibration step should be summarized in 1-2 sentences. If needed, all non-standard flagged visibilities (i.e., others than 'auto-correlation', 'shadow', '*POINTING*' and '*ATMOSPHERE*') should be justified and illustrated using the relevant diagnostic plot. In addition, the report should at least contain the following plots and corresponding captions :

- **Phase vs UV distance & amplitude vs UV distance of the flux calibrator**
  before and after calibration

- **Phase vs Time & amplitude vs Time of the phase calibrator**
  before and after calibration

- **Phase vs Frequency & amplitude vs Frequency of the phase calibrator**
  before and after calibration

Please upload the two files labeled with your name, e.g. calibration_script_muehle.py and calibration_report_muehle.pdf, **to ftp://ftp.astro.uni-bonn.de/incoming/muehle before the deadline.** (Note: Once uploaded, the content is no longer visible to any outside user.)