

Practice Work Session #5 (2h)

Preparation of the observations

Objectives

The objective of this work session is to prepare a complete proposal for observing with the VLTI using the tools that have been introduced during the week. The result will be presented on Friday 8 morning with a comment on the problems that you have encountered.

Input data

Take one of your favorite astrophysical topics for which you would like to request some VLTI observing time and proceed as you would do with a *normal* proposal. Choose AMBER or MIDI depending on your objectives.

Output data

1. explicit in brief the scientific rationale
2. explain the immediate objectives
3. list the targets you want to observe with the appropriate magnitudes (JHK for AMBER, N for MIDI) but also the V magnitude and spectral type for active guiding
4. give the requested VLTI configuration:
 - a. Telescopes: UT/AT
 - b. Baseline(s)
 - c. Hour angle range
 - d. Schedule constraints: dark moon, part of the night
 - e. Fringe tracker, dual-feed
5. give the requested instrument configuration (cf. instrument presentations):
 - a. spectral configuration
 - b. other parameters
 - c. required accuracy (visibility or phase)
6. calibrators: strategy, list of calibrator stars
7. technical feasibility:
 - a. expected visibility range
 - b. date of observations
 - c. total observing time
8. preparation tasks if any
9. plan for interpreting the data
10. general conclusion on the exercise

Material

You can use ASPRO, getCal, SIMBAD, ADS and produce figures that can be viewed. Use the numbers given in the AMBER, MIDI and VLTI presentations to assess the feasibility of your program.