

EXERCISE #4

SEARCH FOR CALIBRATION SOURCES

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Abstract. The objective of this exercise is to find suitable calibration stars for an interferometric array like the VLTI.

1 Objectives

To provide practical experience identifying potential interferometric calibration sources and choosing appropriate objects based on astrophysical and instrumental characteristics.

2 Input Data

For each of the three targets below choose three calibration sources (one primary and two secondary) for use in an interferometric observing program.

3 Target List

- TW Hya
- IM Peg
- Beta Cen

4 Output Data

You should collect classification (e.g. spectroscopic binary) and spectral energy distribution data, estimate angular diameters, and compute timing availability for each of your calibration sources. This material should be illustrative for the observing program preparation exercise 5 (Malbet & Perrin, same volume).

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5 Material

You may use:

- SIMBAD: <http://simbad.u-strasbg.fr/sim-fid.pl>,
- the Catalog of Infrared Observations (CIO, Gezari 1999) in ViZieR (II/225/Catalog):
<http://vizier.u-strasbg.fr/viz-bin/VizieR>,
- ASPRO: <http://www-laog.obs.ujf-grenoble.fr/jmmc/download/aspro>,
- getCal: <http://isc.caltech.edu/software/getCal>
- and/or another toolset of your choice

to collect the relevant data and make the required calculations.