

**Observational Astrophysics II**  
**Interferometric Practice Work Session 3**  
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**Calibrators**

This practice work session focuses on the selection of a good calibrator for interferometric observations. The SearchCal tool (SC) is used here ([http://www.jmmc.fr/searchcal\\_page.htm](http://www.jmmc.fr/searchcal_page.htm)).

1. Starting SC

We will try to find the appropriate AMBER calibrators for the star Achernar in the K-band (2.1  $\mu\text{m}$ ).

- Download the SearchCal application.
- Select the K-band in the Instrumental Configuration
- Select Achernar in the Science Object box and click enter
- Click Get Calibrators and be patient...

The server side of the program queries the various existing catalogs. Hopefully, if the CDS answers arrive in a reasonably short time, a result panel appears.

2. The result panel

- i. Which criteria are the most important (for you) to define the best calibrator?
- ii. Play with the different filters at the bottom of the panel. What is the calibrator that you would choose for the observation of the star and why?
- iii. What are the drawbacks in the choice of this star?

3. MIDI calibrator

We will now find the calibrators of Achernar, but observed with MIDI at 10 $\mu\text{m}$  (N-band).

- i. Why are the MIDI calibrators different from the AMBER ones?
- ii. What is the reason the visibility values are much closer to one in this case?