

List of Candidates: Nordic Optical Telescope

Red Horizontal Branch (RHB) and Early Asymptotic Giant Branch (EAGB) used to study effects of evolution:

We are looking at Eggen (1997), AJ 114, 1666 giving a list of 61 RHB and early AGB stars in the solar vicinity. From this list, 5-10 stars are to be isolated based on

- evolutionary stage (choosing RHB over AGB; photometry given)
- observability (coordinates need to be assembled)
- good coverage of the parameter metallicity (here called $P[\text{Fe}/\text{H}]$).
- Exposure times need to be calculated: we aim to achieve a S/N of 200:1 per pixel at H-alpha.

Eclipsing Binary (Algol system):

CG Cyg: Eclipses: Aug 13 (UTC: 23:32 Primary eclipse),
Aug 14 (UTC: 22:15 Secondary eclipse)

V1430 Aql (SB2 of two solar-type stars).

Note: This may be a “young” system.

Check: <http://webviz.u-strasbg.fr/viz-bin/VizieR?-source=J/A+A/446/785>

Doppler Imaging (spots) of Ap stars:

HD 170000

HD 184905

Atmospheric oscillations of roAp stars:

HR 8097

See: Kochukhov & Ryabchikova (2001, A&A, 374, 615)

Mass of compact stellar systems:

V1357 Cyg