Table 1: LOI frequencies and 1-σ error in (μHz) of low-l p modes (d: modes detected but no frequency estimate available)

n	l=1	l=2	l=3
15	-	-	2407.68 ± 0.15
16	-	2486.06 ± 0.13	2542.00 ± 0.15
17	-	2619.69 ± 0.16	2676.35 ± 0.20
18	d	2754.38 ± 0.10	2811.50 ± 0.18
19	d	2889.74 ± 0.10	2946.80 ± 0.16
20	-	3024.96 ± 0.11	3082.16 ± 0.11
21	3097.71 ± 0.31	3159.67 ± 0.17	3217.84 ± 0.11
22	3233.08 ± 0.15	3295.41 ± 0.18	3353.83 ± 0.45
23	-	3430.89 ± 0.18	3490.05 ± 0.30

n	l=4	l=5	l=6
15	2458.70 ± 0.23	2506.02 ± 0.18	-
16	2592.87 ± 0.17	2641.30 ± 0.21	d
17	2728.80 ± 0.21	2777.20 ± 0.14	d
18	2864.09 ± 0.08	2913.56 ± 0.15	d
19	3000.21 ± 0.14	3049.78 ± 0.12	d
20	3135.89 ± 0.13	3186.23 ± 0.15	d
21	3271.61 ± 0.16	3322.96 ± 0.31	-
22	3407.98 ± 0.24	3460.42 ± 0.32	-
23	3544.12 ± 0.29	-	-

Kosovichev (1994) about a core not rotating much faster than the solar surface.

12. Solar-like oscillations in η Boo (H. Kjeldsen and T. Bedding)

We have observed evidence for p-mode oscillations in the G0 IV star η Boo ($V = 2.68$). This represents the first clear evidence of solar-like oscillations in a star other than the Sun. We used a new technique in which we measure fluctuations in the temperature of the star via their effect on the equivalent width of the Balmer lines. The observations were obtained over six nights with the 2.5 m Nordic Optical Telescope on La Palma and consist of 13000 low-dispersion spectra. The upper part of Fig. 1 shows the power spectrum of the equivalent-width measurements (the inset shows the window function). We find an excess of power at frequencies around 850 μHz (period 20 minutes) which consists of a regular series of peaks with a spacing of $\Delta\nu = 40.3\,\mu$Hz. We identify 10–13 oscillation modes (lower part of Fig. 1), with frequency separations in agreement with theoretical expecta-

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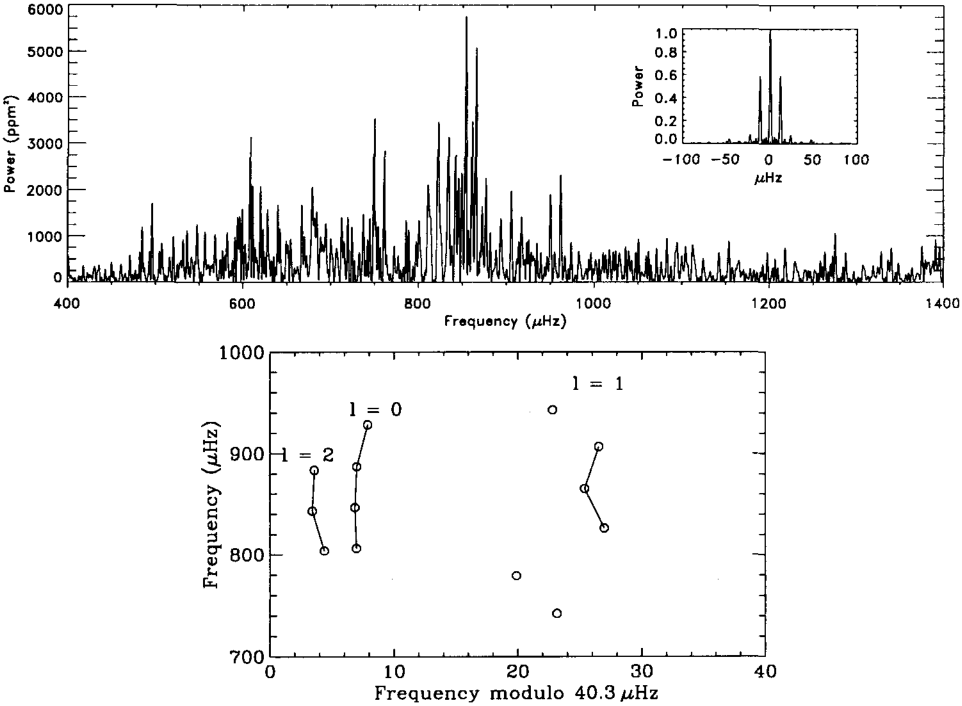

Figure 1. Solar-like oscillations in η Boo.

tions. Similar observations of the daytime sky show the five-minute solar oscillations at the expected frequencies (Kjeldsen *et al.*, 1994).

13. roAp stars (D. Kurtz and P. Martinez)

Among the A stars there is a subclass of peculiar stars, the Ap stars, which show strongly enhanced spectral lines of the Fe peak, rare earth and lanthanide elements. These stars have global surface magnetic fields several orders of magnitude larger than that of the Sun, 0.3 to 30 kGauss is the measured range. For stars with the strongest magnetic fields, the spectral lines are split by the Zeeman Effect and the surface magnetic field strength can be measured. Generally, though, the magnetic fields are not strong enough for the magnetic splitting to exceed other sources of line broadening. In these cases residual polarization differences between the red and blue wings of the spectral lines give a measure of the effective magnetic field strength – the integral of the longitudinal component of the global

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