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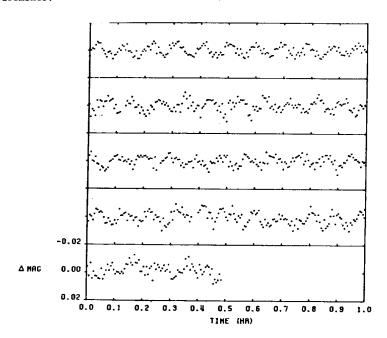
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THE DISCOVERY OF RAPID OSCILLATIONS IN THE Ap STAR HD 134214

HD 134214 has been discovered to be a rapidly oscillating Ap star with a period of approx. 5.65 min. It is a cool member of the class of CP2 stars and has a spectral type of FO SrEu. Photoelectric photometry in Johnson B and V was obtained with Lowell Observatory's 1.1 m telescope and a dual-channel photometer. Four nights of data reveal so far only a single period with a variable amplitude of about 3 mmag in B and a much smaller amplitude in V. Continuous integrations of 20 sec were utilized, with breaks only for sky measurements.



HD134214 B 85-MAY-13/14

Figure 1: B photometry of HD 134214 on the night of 1985-May-13/14. The time series progresses left-to-right and top-down.

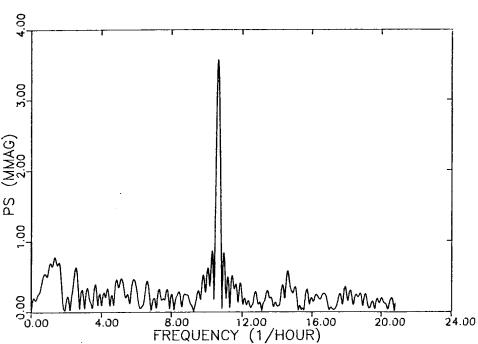


Figure 2 : The power spectrum of the data appearing in Figure 1. The semiamplitude of the 5.65 min period is about 3.6 mmag.

HD 134214 is the eleventh known member of the class of rapidly oscillating Ap stars. All previous members of this class have been discovered by Kurtz. The characteristics of the first nine members are tabulated in Kurtz (1984), while those of the tenth member are given in Kurtz and Kreidl (1985).

The B observations for the night of 1985 May 13/14 are shown in Figure 1. The power spectrum of these data is presented in Figure 2. A detailed analysis will be presented elsewhere.

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References:

Kurtz, D.W. (1984) Mon.Not.R. astr. Soc., 209, 841. Kurtz, D.W. and Kreidl, T.J. (1985) Mon.Not.R. astr. Soc., submitted