

One W-R star, HD 50896, was observed in the cluster Cr 121. This star with $M_V = -2$, according to the color-magnitude diagram of the cluster (Feinstein, unpublished), is in the main sequence very near the turn-off point where the stars begin to evolve to the red giants. The cluster is very young and its diagram is the same as that of η and α Persei.

In NGC 6321 there are two W-R stars. This cluster observed by Kron and Breckinridge in the PV system, and by Feinstein in the UBV system (unpublished), shows that these two stars are also at the turn-off point. The absolute magnitude of both are around $M_V = -4.5$. Two of stars are present above both W-R objects.

The fact that some W-R are members of clusters, is also confirmed by Westerlund who found this kind of stars in three clusters of LMC. All are on the main sequence and very near the point where the evolution to the giants. The absolute magnitude is around -6 .

Andrillat showed that the field W-R stars have absolute magnitudes in a range between $M = -1.5$ and -5 , so that these stars display a large spread in absolute magnitude.

As this fact is confirmed in clusters, and they are also always near the turn-off point, it seems that the condition of W-R stage is connected in some way with the beginning of the evolution to the red giants. Then, any main sequence star may be a W-R- in the range of absolute magnitude between -1 and -6 .

LA ESTRELLA PECULIAR 17 LEPORIS

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Espectrogramas tomados en Mount Wilson y en Lick, en la región del rojo, confirman la conclusión de Widing de que 17 Leporis es un sistema binario y que la estrella secundaria es de tipo tardío. El período tentativo de Widing ha podido ser corregido a 258,2 días y se ha obtenido $K_2 = 22,5$ km/seg y $f(\gamma_2) = 0.30 \odot$. La curva de velocidades de la estrella primaria debe ser obtenida de la línea de Mg II en λ 4481, pero el material de que se dispone en la actualidad en la región fotográfica no es suficiente para tal fin. Las velocidades de Mg II λ 4481 obtenidas hace años por Struve en el Observatorio de Yerkes parecen confirmar el

viene del trabajo anterior

References

- Andrillat, Y., Etoiles a raies d'émission p.61 1957
Breckinridge J.B. and Kron G.E., Pub. A.S.P. 75. 248 1963.
Westerlund B., Kungl. Svenska V. Handl., 8 N 3, 1961.

período pero no permiten obtener conclusiones respecto al valor de K_1 .

Red spectra taken at Mount Wilson and at Lick confirm Widing's conclusion that 17 Leporis is a binary system and that the secondary component is a late type star. Widing's tentative period has been improved to 258.2 days, and values of $K_2 = 22.5$ km/sec and $f(\pi_2) = 0.30 \odot$ have been derived. The primary star's velocity curve will have to be derived from the Mg II λ 4481 line but the presently available material in the photographic region is not sufficient for the purpose. Struve's earliest Yerkes radial velocities from Mg II λ 4481 seem to confirm the period but nothing is suggested in regard to the value of K_1 .

TECNICA FOTOGRAFICA PARA LA PRUEBA DE LA CAUSTICA

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Basado en propiedades de la prueba de la cáustica visual, el autor ha desarrollado una técnica fotográfica capaz de documentar en forma objetiva las características de las superficies ópticas cóncavas que pueden ser estudiadas con la cáustica visual.

Las placas obtenidas se miden por medio de una máquina capaz de medir en dos coordenadas y se reducen aplicando métodos conocidos. El acuerdo entre el método visual y el fotográfico es bueno y mejora a medida que aumenta la relación D/F. Se presentan esquemas de instalación, planillas de medidas y reducciones y gráficos comparativos del método visual y la técnica fotográfica.

El trabajo será publicado completo en otra parte.

Based on some properties of the visual caustic test, the author has developed a photographic technique capable of rendering an objective document about the features of concave optical surfaces which are measurable with the visual caustic test.

The plates are measured in a machine capable of measuring in two coordinates and are reduced following well known methods. The agreement between the visual and photographic methods is good and improves at high D/F ratios. Drawings of the apparatus are presented along with measurement and reduction sheets and graphs comparing the visual method and photographic technique.

The complete paper will be published elsewhere.

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