Tololo (Chile); con el cual se midieron 100 objetos correspondientes a 39 radiofuentes.

Se presentan como resultados de este trabajo las identificaciones probables obtenidas a traves de coincidencias de posiciones con objetos peculiares y de la presencia de objetos con exceso ultravioleta. Las fotografías de las zonas de las radiofuentes han sido reunidas en un atlas.

R, I PHOTOELECTRIC OBSERVATIONS OF ϵ CrA Carlos A. Hernández (Observatorio Astronómico de La Plata)

This WUMa star, classified as FOV, has been observed photoelectically with the 40 cm telescope, N°2, at Cerro Tololo.

The observations in R, I were made simultaneously with U,B,V observations by Santiago Tapia with the 40 cm Cerro Tololo telescope N°1.

Our observations confirm the period given by A.W.J. Cousins.

An analisis of the variation of V-R suggests the existence of a red excess before minima and a blue excess after them.

AG DEGASI

L.A. López and Jorpe Sahade* (Observatorio[®]Astronómico de La Plata)

The present investigation reports on results from the study of two spectra taken in 1961 and 1963 at the Mount Wilson Observatory with a dispersion of about 10 A/mm in the photographic region and about 20 A/mm in the region of H α .

In general, the spectrum of AG Pegasi displays the same appearance as ten years ago as reported by Merrill, although there seems to be some differences. On our plates we have:

- The M-type spectrum that seems to have become relatively stronger. The lines of the M-type spectrum suggest velocities of about - 12 km/sec.
- 2) A set of absorption lines, like He I 3888, that shows the

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Fig. 1







Fig. 3

effect of diluted radiation. These lines are multiple and display variable intensity. The two plates that we have mea sured give the following radial velocity values for He I 3888:

Flate of 1961 August 29 Fla	te of 1963 November 24
-100 km/sec	-100 km/sec
-300 km/sec	-240 km/sec
-400 km/sec	-450 km/sec

- A set of narrow emissions, some of them corresponding to for bidden transitions. Among these narrow emissions, lines not previously announces of 0 II belonging in multiplets 1 and 2 of Miss Moore's Tables, were identified.
- 4) A set of broad emissions which in some cases underly the na rrow emissions. Among these broad emission lines of N III at 3754 and 3771A not previously identified features were found.

That is interesting to note is that the broad emissions corres pond to edge velocities of the order of the velocities from the most violet displaced line of He I 3888 and therefore they must arise from the material of the envelope where the He I lines showing the effect of diluted radiation are formed.

The narrow emissions some of which correspond to forbidden transitions and yield velocities of the order of -25 km/sec, must

* Member of the Carrera del Investigador Científico, Consejo Nacional de Investigaciones Científicas y Técnicas, Argentina. be produced in a much outer envelope. Consequently, the material that is ejected by the object in the eruptions must be accelerated perhaps by the effect of radiation pressure from the hot componnent

and at certain distance from the source the material must decelerate and become almost stationary.

- Fig. 1) a) The region of HeI 3888 A on August 29, 1961.b) The region of HeI 3888 A on November 24, 1963.
- Fig. 2) a) Profile of HeI 3888 A on August 29, 1961. b) Profile of HeI 3888 A on November 24, 1963.
- Fig. 3) Profile showing the emission structure at H γ 4340 A. (Superposition of a narrow and a broad and diffuse features).

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