la razón por la cual ciertos autores (M. Schmidt, CV. Reddish) han hallado distintos valores de k, al considerar para su determinación regiones de muy diferente extensión.

SPECTROSCOPIC OBSERVATIONS OF β CANIS MAJORIS

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The star β C Ma was observed during two nights in January 1962. The instrument used was the grating spectrograph attached to the 1.52 cm. (60 inch) telescope of the Bosque Alegre branch of the Córdoba Observatory which gives a dispersion of 42 Å/mm.

The main conclusions obtained from a discussion of our observations together with those of previous observers, are the following:

1.- The radial velocity curves are not permanently distorted by humps in the ascending or descending branch. This means that, a)inmore or less irregular intervals a third oscillation is excited and becomes coupled with one of the fundamental ones, or, b) a third oscillation not exactly conmensurable with the fundamental ones is always present, and from time to time, coupling does appear.

2.- One of the two fundamental waves has shortened its period from $.2513016 \pm 3 \times 10^{-7}$ day (1909/34) to $.2513001 \pm 3 \times 10^{-7}$ (1934/62). The period of the other one is equal to $.25002238 \pm 2 \times 10^{-7}$ and remains constant over the whole interval covered by the observations (1909/62). The mean maximum epoch for the primary wave is: $T_1 = 2418360.773 \pm .004$, and for the secondary (the longer one), $T_2 = 2427467.706 \pm .004$ (1909/34) and $T_2 = 37681.800 \pm .01$ (1939/62).

This work will appear in full in the Boletín del Instituto de Matemática, Astronomía y Física, Vol. II, n 2.

EL MODELO DE V453 SCORPII

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El análisis de espectrogramas tomados en Córdoba, Mount Wilson y Lick, combinados con los datos disponibles de la fotometría, permite describir al sistema V453 Scorpii como formado

por una estrella primaria de tipo B1 Iab y una secundaria de radio menor pero cuya masa es probablemente mayor y, en todo caso, del mismo órden de magnitud que la de otra estrella. Como se informó en el Boletín N° 4 el espectro de la estrella secundaria sólo muestra líneas de emisión, las cuales deben originarse en material que es eyectado por dicha estrella con simetría esférica.

El comportamiento de los detalles espectrales sugiere la existencia de una corriente gaseosa desde la estrella B hacia la compañera (en la descripción que apareció en el Boletín N°4 se ha deslizado un error) que puede ser la fuente de opacidad contínua que afecta al espectro en ciertas fases del ciclo.

El trabajo in extenso aparecerá en el número del 15 de febrero de 1965 del Astrophysical Journal.

THE MODEL OF V453 SCORPII

The study of sets of spectrograms taken at Córdoba, Mount Wilson and Lick, combined with the available photometric data, has allowed us to describe the system V453 Scorpii as formed by a primary star of spectral type B1 Iab and a smaller secondary, the mass of the latter being probably larger but in any case of the same order of magnitude than the mass of the former. As reported in Boletín N° 4 the spectrum of the secondary star only shows emission lines that probably originate in material that is ejected by the star with spherical symmetry.

The behavior of the spectral features suggests the existence of a gaseous stream from the B star towards the companion (there is a mistake in the description in Boletín N°4) that could be the source of continuous opacity that affects the spectrum at certain phases of the orbital cycle.

The paper in full will appear in the February 15, 1965 issue of the Astrophysical Journal.

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