

and from the standard lamp. The two agree and give a flux of 3.50×10^{-20} ergs $s^{-1} \text{ cm}^{-2} \text{ Hz}^{-1}$ or 3.40×10^{-9} ergs $s^{-1} \text{ cm}^{-2} \text{ \AA}^{-1}$.

This figure is substantially lower than was adopted by Code (1960) or found by Willstrop (1965).

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29b. WORKING GROUP ON LINE INTENSITY STANDARDS

Systematic equivalent width comparisons as initiated by K. O. Wright during the Seventh General Assembly of the IAU in 1948 and continued by G. Cayrel de Strobel since the Twelfth General Assembly in 1964 are meeting less and less response from the astronomical community. Griffin has stressed systematic errors in spectrographic results. For instance he claims in his paper (*M.N.R.A.S.*, **143**, 319) that owing to the light thrown in the wings of the instrumental profiles, the observed equivalent widths of absorption lines in late type stellar spectra are 5 to 10 % less than the true values. Furthermore Griffin pointed out the weakness of purely spectrographic comparisons which are all affected by the same type of errors. What is really needed is to know the true equivalent width of a few lines as they can be obtained from an accurate double pass photoelectric scanner. Pagel suggested that this can be done by comparing spectra of integrated sunlight from sky or minor planets with scans obtained by solar spectrometers. Griffin prefers that a bright star be used for this purpose. A complete change in the activity of this working group could very well be decided if the primary object is to have true standards of equivalent widths and if these cannot be obtained from conventional high dispersion spectrography.

G. CAYREL DE STROBEL

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29c. GROUPE DE TRAVAIL SUR LES ÉTOILES BE

Spectrophotométrie, variations, vitesses radiales

A. Peton (*Meudon*) à partir de spectres à petite dispersion, a évalué une période de 33 ans pour les variations de l'émission de HD4180, une classe B5 IV et des oscillations assez importantes de l'enveloppe absorbante sur 3-4 ans (non publ.).

F. R. Hickok (*Dunlap*) a étudié les structures fines et les vitesses radiales de ϕ Per à grande dispersion de telle sorte que les courbes de vitesse sont plus détaillées, mais, la période ne change pas. Probablement binaire. Des difficultés sont soulignées (non publ.).

Des variations spectrales et de vitesse radiale ont été observées par M. Hack et P. Stenner (*Trieste*, dans l'enveloppe de ζ Tau (publ.) ainsi que par Van der Wel (*Utrecht*) pour la période 1964-66 (non publ.). A. M. Delplace (*Meudon*) a mis en évidence une relation très étroite entre les profils Balmer H et la période de 7 ans. L'enveloppe, en moyenne, est en récession (publ.).

J. P. Swings (*Liège*), N. L. Burnichon, D. Chalonge et L. Divan (*I.A. Paris*) ont déterminé le spectre continu et la classe spectrale de l'étoile HD45677 (B2 IVe) ainsi que l'identification des