

DISCUSSION

PECKER (paper by C. JASCHEK). I would like to complement the paper by Dr. Jaschek in noting that between the space ultraviolet spectrum, and the "conventional" part of the spectrum ($\lambda > 3700 \text{ \AA}$) there is a *large* part of UV (down to 3100 \AA) easily reached from the ground and incorporated (for at least 30 years) in the IAP classification (Barbier, Chalonge, Divan). The IAP (BCD) classification is based only on the H - spectrum (Balmer jump, UV and visible gradients) and gives, in addition, UV (ground based) peculiarities of a high physical significance. Interstellar absorption is also easily corrected in the IAP classification.

CAYREL (paper by C. JASCHEK). *Comments on comparison between spectral classification and photometric systems.*

- 1) One fundamental advantage of spectral classification over photometric systems, which has not been mentioned, I believe, is the fact that spectral classification is not affected by interstellar reddening whereas photometry is.
- 2) There is no doubt that spectral classification at about 2 \AA spectral resolution contains more information on the star than broad or intermediate band photometry. Nevertheless, most of this information is lost when the spectrum description is summarized into to integers, spectral type and luminosity class.

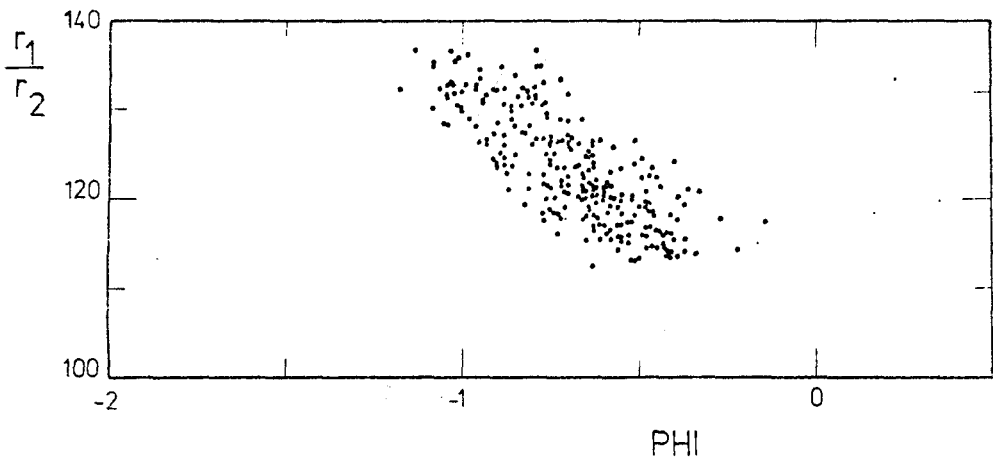
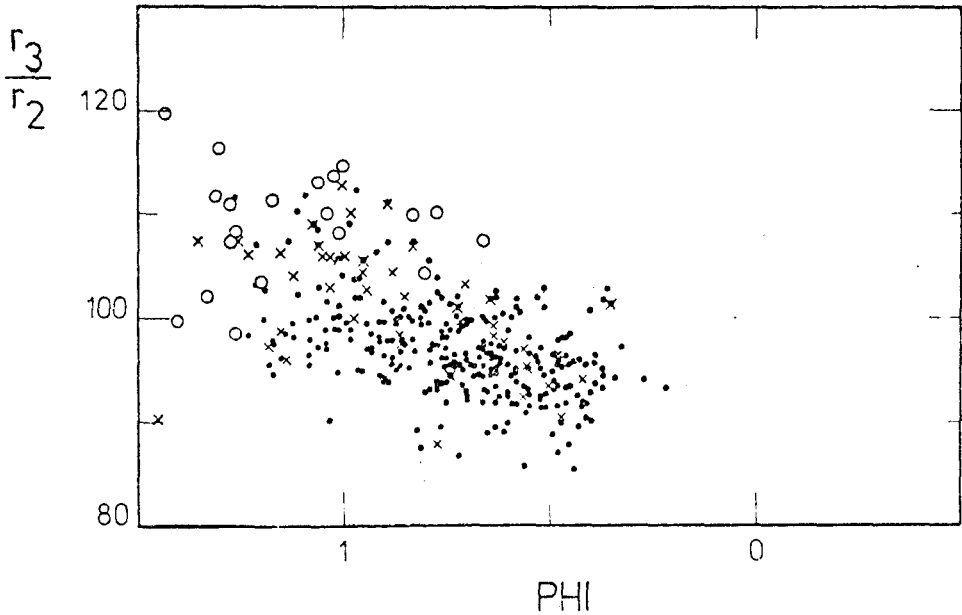
CODE (paper by C. JASCHEK). In one sense subdwarf 0 stars might be regarded as the normal stars, since unlike 0 main sequence stars they do not have extended atmospheres, mass loss etc...

PECKER (paper by K. NANDY, A. CUCCHIARO, C.M. JASCHEK, J.P. SWINGS and J.M. VREUX). 1. Congratulations to the Edinburgh - Liège groups for a magnificent work, for the good measurements, for making available to many groups their fine data. Congratulations and thanks ! 2. However, I do not believe that UV measurements should not be used as "complements" to spectral classification. The UV spectrum is formed in a broad region of the star, it does not measure the same things as the MK spectral classification system (or any other classical system). 3. In particular, reddening has two components - an interstellar, - a circumstellar : now are the two indices being used to distinguish supergiants from main sequence stars could really be used that way ? They might show the existence, or not of a circumstellar cloud ! The latter may vary from star to star ! I do believe that the departures from correlations laws, the *dispersions* of the relations between UV indices and visible indices is *the* interesting thing, - not their rough agreement !

HOUZIAUX (papers by A. CUCCHIARO, C. and M. JASCHEK, and K. NANDY).

Nandy has proposed to classify the stars according to the values of the photometrically derived Φ and Ψ parameters. Cucchiaro and the Jascheks propose a system based on depth ratios of spectrometric features. Is there any correlation between the results obtained by these two approaches?

CUCCHIARO. Answer: Nandy has plotted the ratios r_1/r_2 and r_3/r_2 versus Φ . The results shown and the two figures below indicate a good correlation between our ratios and Nandy's quantity (dots denote main sequence stars, crosses class III objects, while circle refer to class I and II stars).



KODAIRA (paper by CUCCHIARO, C. and M. JASCHEK).

I suspect that you may have difficulty to detect Am stars in UV region which are classified as Am according to the weakness of CaII/ScII lines in the photographic region, just because of the same reason as far Mn-type Ap stars. Have you noticed this point in your analyses ?

CUCCHIARO. Answer. In our investigation, we have found that Am stars can be segregated fairly easily from usual stars on the basis of the strength of the features at $\lambda\lambda$ 1850, 1920, and 2400 Å. But stars in which the differences between the hydrogen line types and the metallic line types in the visual are very pronounced are more easy to detect.