



Figure 1. H-R diagram for seven planetary nuclei of our sample: open circles are results of Pottasch, filled circles are results of this paper. Solid curves are the predictions of Paczynski (1971).

UV RADIATION FROM CENTRAL STARS OF PLANETARY NEBULAE

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The flux originating from the central stars of 27 planetary nebulae in the spectral range 1200–2000 Å has been deduced from the analysis of a large number of released IUE low resolution spectra.

The stellar UV continuum has been compared with black-body energy distributions. Preliminary colour temperatures have been derived for

some central stars.

The main conclusions are:

1. Central stars of planetary nebulae with O-Of, OVI and continuous spectra appear to be reproduced in the interval 1200-2000 Å by black-body of very high to infinite temperature.

2. Considering only the spectral range 1500-2000 Å, a better representation is obtained with temperatures of 30-50,000 K for O-Of stars, or with substantially higher temperatures for objects with OVI or continuous spectra.

From these results it is evident that the spectral range 1200-1500 Å is particularly important for the evaluation of the colour temperature of central stars of planetary nebulae and that black-body temperatures deduced from the spectral range  $\lambda > 1500$  Å cannot represent the 1200-1500 Å interval.

#### ULTRA-VIOLET SPECTROPHOTOMETRY OF SOME HOTTER CENTRAL STARS

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A spectrophotometric survey has been made for about 20 central stars of planetary nebulae, with emphasis mainly on hot stars. We use low-resolution IUE spectra, observed by ourselves or obtained from Data Center, together with, in some cases, results from optical observations. Data have been extracted and merged, regions of saturation eliminated, ITF errors corrected and nebular continua subtracted. Careful assessments have been made of reddening constants, and of data used to calculate Zanstra temperatures.

The stellar energy distributions have been compared with those for black-bodies, LTE line-blanketed models, and NLTE models. We find no evidence for conflict between colour temperatures and He II Zanstra temperatures (allowing in some cases, for the possibility of incomplete absorption by He II).

Our study includes the seven stars studied spectroscopically by Heap (1977) and the six stars for which Mendez et al. (1981) have made NLTE models. For all but one of the objects considered by Mendez et al., black-body colour temperatures and He II Zanstra temperatures are higher than those obtained from analysis of spectral features using static plane