for most of the studied planetaries and are usually significantly higher than the temperatures determined from [OIII] lines which refer to the He^+ regions. A correlation between the electron temperatures and effective temperatures of central stars has been found; the planetaries with hotter nuclei have slightly higher electron temperatures in the He^{++} regions. Finally, intensities of ultraviolet lines of [NeV] λ2975 and [NeIV] λ2424 have been predicted for the studied nebulae.

SPECTROPHOTOMETRY OF SIX PLANETARY NEBULAE

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In addition to numerous emission lines arising from the ionization of chemical elements, well-exposed nebular spectrograms reveal a Balmer continuum in emission hitherto attributed to the second level radiative recombination of the hydrogen atoms and to the two-photon contribution. The very intense lines with regard to the adjacent continuous spectrum have been easily measured by many workers for identification, Balmer decrements, line ratios ... whereas few data are available involving continuum measurements. As well as the mean slope of the continuum, the Balmer discontinuity is very sensitive to the physical conditions prevailing and the presence of dust in the nebulae.

We present recent spectrophotometric data obtained at the Haute Provence Observatory using the new method of comparison between an extended source (nebula) and star. This study is made possible by means of the Chalonge spectrograph, the plate holder of which widens by oscillating motions of the stellar spectrum in the red. The spectrophotometric procedures are similar to those described previously for the Orion Nebula. The results are given in terms of absolute gradients defined within the spectral range λλ5000-3100 and the strength of the Balmer jump. The electron temperature derived from the continuum parameters is compared with values obtained by other authors.

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