

NEW ABSOLUTE INTENSITIES OF THE EMISSION LINES OF 15 PLANETARY NEBULAE
THE MEMBERS OF THE GALACTIC CENTRE GROUP

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The new results have been obtained for 15 planetary nebulae, using the new spectrograms obtained at the Abastumany Observatory in 1971. The planetaries belong to the large Galactic centre group, studied by the authors earlier.

The monochromatic energy flux measured in series of emission lines in the region 3700-6700 Å (in 10^{-12} erg \cdot cm $^{-2}$ \cdot sec $^{-1}$) is given.

EMISSION LINES IN THE NEAR INFRARED SPECTRA OF FAINT PLANETARY NEBULAE

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We obtained spectra of twelve faint planetary nebulae at the Cassegrain focus of the 193 cm telescope at Haute Provence Observatory (dispersion: 230 Åmm $^{-1}$, spectral range 8000-11000 Å, receiver: ITT image tube with S1 photocathode).

All nebulae exhibit the three strong lines of HeI λ 10830 and of [SIII] at λ 9069 and 9532.

In addition the high excitation nebulae IC 2003, IC 351, NGC 6886 and J900 show HeII λ 10123.

Paschen lines are visible in NGC 6720 (P9, P8 blended with [SIII], and P7), NGC 6879 (weak), NGC 6886 (P6 to P11), IC 2149 (P6 to P20) IC5217 (P7 probably present), J900 (P6 to P13). They are absent in IC 1747, Hu 1-1, Vy 1-1 and J320.

Let us note that λ 1-HeII λ 10123 is absent in Hu 1-1, while λ 4686 and λ 5411 are present; 2-HeI in λ 10830 is weak in NGC 6720 compared to the [SIII] lines. (Paper will appear in Comptes Rendus de l'Académie des Sciences de Paris.)