

THE METAL-LINE SPECTRA OF CENTRAL STARS OF PLANETARY NEBULAE

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ABSTRACT. We present spectral descriptions based on high-resolution spectrograms of central stars of planetary nebulae, obtained with the ESO 3.6-m telescope + CASPEC (Cassegrain Echelle Spectrograph). We make preliminary determinations of stellar photospheric metal abundances, using non-LTE model atmospheres and non-LTE line formation calculations.

REVISITED MASS-LOSS RATES OF PLANETARY NEBULA NUCLEI OBSERVED WITH IUE

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ABSTRACT. The first order moment of P Cygni line profiles has been computed for the case of resonance doublet and subordinate line transitions, using realistic velocity and opacity distributions. This improved method has allowed us to rederive mass-loss rates for a sample of 17 PNN observed in the low resolution mode with IUE. The average value of our mass-loss rates amounts to $10^{-7} M_{\odot}/\text{yr}$.

A detailed account of this work will be published elsewhere.