

THE PROPERTIES OF PLANETARY NEBULAE NUCLEI: STELLAR WINDS

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We present IUE observations of some nuclei of Planetary Nebulae. From these data we derive the stellar photospheric parameters (T_{eff} , L_{bol} , $\log g$), and the wind characteristics (velocity, mass loss rate). T_{eff} , R_* , L_{bol} are derived from UV low resolution spectra, combining optical and radio data, from Bianchi (1988) or from new IUE data, with the same method (fit of the UV continuum with model atmospheres for high gravity stars, after correcting for reddening and for the contribution of continuum emission by the nebular gas). P Cygni profiles from IUE high resolution spectra are fitted with the SEI method and V_∞ is derived. The non-LTE ionisation in the wind and the mass loss rate are computed as in Bianchi et al. (1986). Details are given in a forthcoming paper. The results for a first group of objects are given in the Table below.

References

- Bianchi, L., Cerrato, S., Grewing, M., 1986, *Astron. Astrophys.* 169, 227.
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Name	PK number	Sp. Type	T_{eff} (K)	R_*/R_\odot	V_{edge} (km/s)	$\log \dot{M}$ (M_\odot/yr)
NGC6210	43 +37 1	O3	60000	0.19	2700	-8.7
NGC6826	83 +12 1	O4f	35000	1.49	1700	-8.9
NGC6891	54 -12 1	O4f	22500	1.91	1550	-7.9
IC4593	25 +40 1	O7	30000	2.60	1350	-8.1
NGC40 (a)	120 + 9 1	WC8	90000	1.7	1800	-6
NGC6543 (b)	96 +29 1	Of-WR	80000	0.64	1900	-6.5

Note: Sp. Types are from: Heap et al., 1987.
 (a) Results from Bianchi, 1991.
 (b) Results from Bianchi et al., 1986.