SPECTROPHOTOMETRY OF 106 TO–BE–CONFIRMED CVS

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Abstract. We present a status report on our ongoing spectrophotometric program to survey as many as possible of the 359 objects in the 751 entry Downes & Shara (1993) catalogue of CVs that are reported as having no published spectroscopy.

1. Introduction

The Downes & Shara (1993; hereafter DS93) catalogue and atlas of CVs lists 751 objects of which 359 have no published spectrum to confirm their CV classification. In 1993 we began to secure optical CCD spectra of as many as possible of them, with a two-fold aim: (i) to prune mis-entries from the excellent DS93 catalogue and (ii) to provide high quality, flux calibrated spectroscopic data for a large sample of faint CVs. The emission line and continuum fluxes will serve as the basis for statistical investigations of the properties of these intrinsically faint and/or distant CVs.

2. Results

We are collecting CCD spectra over the wavelength range $3200\ldots9150\,\text{Å}$ with the ESO 1.5 m (at 7 Å resolution), Asiago 1.8 m (18 Å resolution) and Loiano 1.5 m (10 Å resolution) telescopes. 106 targets have been successfully observed so far, while an additional 38 objects were too faint to be put on the spectrograph slit. Their spectra were published in Bragaglia et al. (1995), Munari, Zwitter & Mikuž (1995) and Zwitter & Munari (1994, 1995, 1996) Among the 106 surveyed systems, 59 show spectra confirming their CV nature (see Table 1), whilst 47 do not show a CV-like spectrum (Table 2). Mis-classified objects include: planetary nebulae, starburst galaxies,

Mira variables, VV Cep and symbiotic stars, OB subdwarfs, white dwarfs and detached WD + M dwarf binaries.

The rate of mis-classification is particularly high for objects from the Palomar-Green survey. We have observed 22 candidates from the PG list: only 5 of them show CV-like spectra (23%).

TABLE 1. Objects showing a CV-like spectrum

AG Aps	NN Cen	UV Gem	GS Pav	HZ Pup	CU Vel
WX Ari	V373 Cen	GY Hya	HX Peg	UY Pup	1H 0204−023
AT Cnc	RR Cha	TT Ind	FY Per	VZ Pyx	1H 0459+248
WZ CMa	BP CrA	TU Ind	PY Per	V478 Sco	1H 0616−818
AQ CMi	EY Cyg	AD Men	TZ Per	UZ Ser	PG 0859+415
SV CMi	V476 Cyg	TU Men	AY Psc	RW Sex	PG 0911−066
V365 Car	V516 Cyg	HQ Mon	BV Pup	KK Tel	PG 0943+521
AM Cas	V747 Cyg	KQ Mon	BX Pup	TW Tri	PG 1114+187
V592 Cas	V751 Cyg	V972 Oph	DY Pup	BB Vel	PG 1524+622
MU Cen	HR Del	BD Pav	HS Pup	CN Vel	

TABLE 2. Objects not showing a CV-like spectrum

V1327 Aql	MV Gem	V3914 Sgr	PG 0248+056	PG 1445+583
KY Ara	SY Gem	V4019 Sgr	PG 0947+036	PG 1459−026
V422 Ara	AN Gru	LQ Sgr	PG 1104+022	PG 1520−050
CT Boo	CG Mus	OV Tau	PG 1116+349	PG 1712+493
CG CMa	V699 Oph	WW Tel	PG 1119+147	PG 2300+166
V411 Car	DP Pav	YY Tel	PG 1128+098	PG 2315+071
BC Cas	V1089 Sgr	EG Uma	PG 1136+581	PG 0240+066
BM Cha	V2038 Sgr	GD 1401	PG 1146+228	
CP Eri	V2493 Sgr	GD 1555	PG 1314+041	
KT Gem	V3909 Sgr	NSV 11561	PG 1403−111	

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