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NEW RADIAL VELOCITIES OF SOME SEMI-REGULAR VARIABLE STARS

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New radial velocities of 11 Semi-Regular variable stars measured in conjunction with the radial velocity program of the Vilnius University Observatory (Sperauskas et al. 2002) are reported here. The radial velocities were measured with the CORrelation RAdial VELocities (CORAVEL) spectrometer of the Vilnius University Observatory (Upgren, Sperauskas, and Boyle, 2002) attached to the 1.5 m Russian Turkish Telescope (RTT150) at the TÜBİTAK National Observatory (TUG), Turkey. Observations are described in Sperauskas et al. (2002). These stars were observed on two or more nights to check for possible variability. The results are tabulated in Table 1.

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Variable	HJD 24	Vr (km/s)	±
V0347 And	51887.297	-47.4	0.8
	51888.218	-47.1	0.9
	51892.312	-45.8	0.9
	51893.271	-44.9	0.8
AH Ari	51887.368	-3.5	0.7
	51888.200	-3.1	0.8
	51890.419	-5.0	0.7
	51892.349	-2.9	0.7
	51893.310	-2.5	0.8
	51894.380	-4.0	0.7
AU Ari	51887.356	44.9	0.7
	51888.208	45.0	0.8
	51892.337	45.9	0.8
	51893.301	45.8	0.8
	51894.370	44.6	0.7
V0453 Aur	51887.569	0.4	0.9
	51888.411	1.0	0.8
	51889.374	0.7	0.7
	51890.483	1.4	0.8
	51894.521	-0.2	0.8

 Table 1. Observed Radial Velocities

Variable	HJD 24	Vr (km/s)	±
RY Cam	51887.336	-19.6	0.9
	51888.395	-19.8	0.8
	51890.476	-20.3	0.9
	51890.477	-20.5	0.9
	51892.432	-19.8	0.8
	51892.434	-20.2	0.7
	51893.367	-17.6	0.8
	51893.369	-16.7	0.9
	51969.249	-26.3	0.7
	51893.367	-17.6	0.8
	51893.369	-16.7	0.9
	51969.249	-26.3	0.7
	51974.266	-26.1	0.7
	51976.296	-26.5	0.7
	52142.432	-25.2	0.8
	52199.623	-18.0	0.7
	52205.634	-17.3	0.7
	52350.275	-23.1	0.6
	52356.278	-23.6	0.7
V0401 Cep	51887.312	-2.6	0.8
	51887.319	-1.4	0.8
	51888.228	-1.1	0.8
	51892.325	-1.9	0.8
	51893.288	-1.8	0.8
BX Lyn	51887.583	-40.3	0.8
	51888.515	-39.5	0.8
	51889.400	-40.3	0.7
	51894.528	-40.3	0.7
X Mon	51887.483	167.6	1.5
	51888.493	166.6	1.2
V0719 Mon	51894.459	13.0	0.8
	51894.467	13.2	0.7
V1151 Tau	51887.457	32.9	0.8
	51888.371	33.1	0.8
	51888.455	33.3	0.8
	51890.469	32.0	0.7
	51893.423	33.5	0.8
AG Tri	51887.378	6.3	0.9
	51888.480	6.8	0.9
	51890.427	5.6	0.8
	51892.372	8.3	1.0
	51893.325	6.6	0.8
	51894.385	6.0	0.9

 Table 1. Observed Radial Velocities (continued)

RY Cam is a SRb type (M3IIIvar) variable with a photometric period of about 135 days. It is seen from Table 1 that its radial velocity is variable, but it is not possible to determine if the variation is periodic as the number of observations is too few. A search in *SIMBAD* gave us five more observations (between -14 to -23 km/s with much less weight) more than 60 years earlier (Joy, 1942). It suffices here to note that the radial velocity variation is not compatible with the photometric period of 135 days.

Hipparcos discovered an astrometric companion to RY Cam at an angular distance of 0'.16 with a position angle of 87 degrees. Prieur et al. (2002) give these as 0'.062 \pm 0'.008 and 325 degrees, respectively. However, a preliminary calculation indicated that the radial velocity variation is not likely to be due to an orbital motion but is compatible with radial pulsation with a variation of about 8% in the radius (Aslan & Yeşilyaprak, 2002). More observations are needed to determine the real cause. The star is on an observing program at TUG.

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