

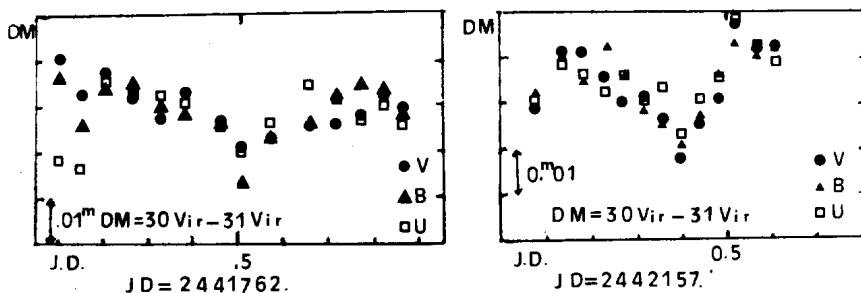
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RHO Vir : A HOT DELTA SCUTI STAR ?

The star Rho Vir was observed photoelectrically during 12 nights since February 27, 1971 to March 1, 1976 with the UBV photometer described by Piccioni (1972) mounted on the 60 cm telescope of the Bologna observatory.

31 Vir and 33 Vir were used as comparison stars; the reductions were performed taking into account also the colour effects of the atmosphere. Light curves obtained during the nights March 20, 1973, April 19, 1974 and February 23, 1975 are reproduced in the Figures.



In order to confirm the variability of Rho Vir we have made search for periods in the observations secured in 7 nights with the Barning (1963) method using a program written by F.Grilli. From the results reported in Table I and II, for the comparison stars 31 Vir and 33 Vir respectively, we note that periods close to $0.^d.022$, $0.^d.029$ and $0.^d.08$ occur very often.

The actual variability of this star is supported also by the fact that Frost et al. (1929) detected radial velocity varia-

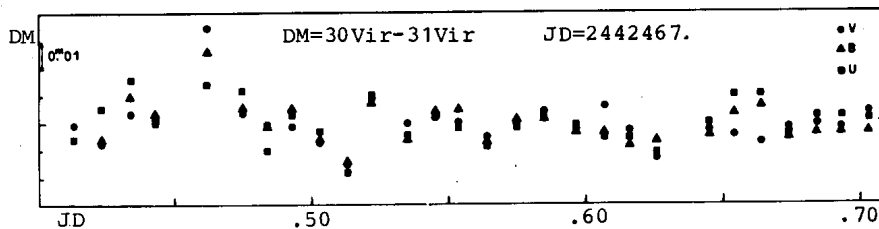
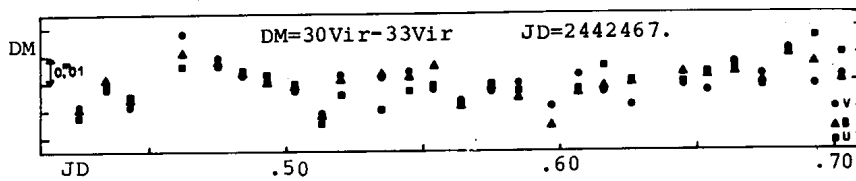


Table I

J.D.	Period	Amplitude	R.F.
2442467.	P1 0.074±0.007	0.010±0.002	26.6 %
	P2 0.023±0.001	0.007±0.002	16.0 %
	P3 0.100±0.008	0.006±0.002	12.0 %
2442468.	P1 0.023±0.001	0.010±0.002	19.2 %
	P2 0.08 ±0.01	0.008±0.002	16.0 %
	P3 0.029±0.001	0.006±0.002	10.0 %
2442833.	P1 0.042±0.003	0.006±0.001	18.0 %
	P2 0.028±0.001	0.006±0.001	28.6 %
2442836.	P1 0.08 ±0.01	0.008±0.001	22.8 %
	P2 0.022±0.001	0.006±0.001	11.0 %
2442837.	P1 0.09 ±0.01	0.006±0.002	14.7 %
2442838.	P1 0.07 ±0.01	0.016±0.004	24.3 %
	P2 0.024±0.001	0.010±0.004	13.0 %
	P3 0.032±0.002	0.009±0.004	8.0 %

Table II

J.D.	Period	Amplitude	R.F.
2442451.	P1 0.048±0.002	0.010±0.001	21.5 %
	P2 0.036±0.004	0.005±0.001	7.5 %
	P3 0.076±0.006	0.005±0.001	8.0 %
2442467.	P1 0.029±0.001	0.010±0.002	23.0 %
	P2 0.10 ±0.01	0.008±0.002	16.4 %
	P3 0.022±0.001	0.006±0.002	20.0 %
2442468.	P1 0.029±0.001	0.014±0.002	27.0 %
	P2 0.040±0.002	0.010±0.002	21.0 %
	P3 0.08 ±0.01	0.010±0.002	19.0 %

tions up to 20 km/sec in about one hour. However the spectral type AOV (Eggen, 1963) or A1V (Osawa, 1959) puts this star outside the normal Delta Scuti instability strip, not far from the left corner of the H-R diagram (Breger, 1979, page 7), being $M_V=2.05$ (Eggen, 1963). We suggest therefore that Rho Vir could be a "Maia variable" linking the Delta Scuti stars with the Beta CMa stars (Breger, 1979, page 23).

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