

NEW ORBIT OF BINARY STAR WDS 21044S1951, FIN 328

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SUMMARY: This paper presents the orbital elements of the visual binary star WDS 21044S1951 = Fin 328. For the pair are given the dynamical parallax, the masses, the absolute magnitudes, the measures, the (O-C)'s and the ephemerides.

The orbital elements of the binary star WDS 21044S1951 have been computed by using the Thiel-Innes method. The dynamical parallax was computed by use of the Baize and Romani method (1946) with magnitudes and spectral types taken from the Lick Index Catalogue of Visual Double Stars, 1961.0

(Jeffers et al 1963). The orbital elements with the dynamical parallax, the total mass, the absolute magnitudes and the major axis are given in Table I, the ephemerides in Table II, the measures and the comparison with the measures in Table III.

Table I

Orbital elements

$P = 12.80$	$\pi_{\text{dyn.}} = 0.^{\prime\prime}0412$	$A = +0.^{\prime\prime}1950$
$n = 28.1255$	$a = 7.59 \text{ (AU)}$	$B = -0.1700$
$T = 1978.455$	$M_{AB} = 2.67 \odot$	$F = -0.2170$
$e = 0.365$	$M_A = 3.2 \text{ abs.mag.}$	$G = -0.0150$
$a = 0.^{\prime\prime}313$	$M_B = 4.6 \text{ abs.mag.}$	$C = -0.1602$
$i = 113^{\circ} 95$	$T_\Omega = 1995.3801$	$H = -0.2370$
$\Omega = 155^{\circ} 56$		
$\omega = 214^{\circ} 07$		

Table II

Ephemerides

t	P	ρ	t	P	ρ	t	P	ρ
1993.0	184.0	0.188	1994.0	166.5	0.307	1995.0	157.6	0.375
1993.25	177.8	0.222	1994.25	163.9	0.328	1995.23	155.8	0.384
1993.50	173.1	0.253	1994.50	161.6	0.347	1995.50	154.1	0.391
1993.75	169.5	0.282	1994.75	159.6	0.362	1995.75	152.4	0.395
						1996.0	150.8	0.397

Table III

Observations and residuals

t	P	ρ	mag	n	Obs	(O-C)P	(O-C) ρ
1951.5	355.0	0.30	5.2–6.5	3	IDS	+1° 4	+0" 09
1976.4552	54.9	0.178		1	McAl	+42° 9	+0" 00
1976.6246	51.3	0.112		1	McAl	+44° 8	-0" 07
1981.4737	161.5	0.303		1	McAl	-2° 3	-0" 03
1982.7627	149.9	0.315		1	McAl	-3° 8	-0" 07
1983.4259	144.9	0.327		1	McAl	-4° 4	-0" 07
1985.4902	134.8	0.370		1	McAl	+1° 8	+0" 05

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**НОВИ ПУТАЊСКИ ЕЛЕМЕНТИ ВИЗУАЛНО ДВОЈНЕ ЗВЕЗДЕ
WDS 21044S1951 = Fin 328**

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Користећи микрометарска и интерферометричка мерења за пар WDS 21044S1951 одређени су путањски елементи, паралакса, маса као и друге астрофизичке величине.