									Verific Binary/ LISA	,	Distance (pc, 1/p. bold for																Discovery DBL	
Unique ID	RA	Dec	SecureDWD binary? Period (day)	Period (mi		od error Alia	Doubleses lined?	ile ? Eclipsin	LISA ng Detectal	able Gmag	literature) P	1 (km/s) K1 e	rror K2 (kr	n/s) K2 error	M1	M1 error N	A2 M2	error Mtotal	Mtotal error	T1	T2	Logg1 L	ogg2 Ref1	Ref 2	Ref 3	Ref 4	Discovery DBL (SPY/ELM to include, incomplete)	Comment
HM Cnc RASSU J060839.5- '04014		15 +15 27 31.0					N	N	Υ		>1500	1200			1		0.2		1.2	0			2002MNRAS 332L78	R 2002A&A386L13I	2010ApJ711L.138R	2023MNRAS.518.5123A		Mass transferring direct impact
04014 TF J1539+5027	06 08 39.5 15 39 32 10	-70 40 14 6 +50 27 38.72	N 0.004328703703 Y 0.004800828014				? Y	? Y	v		>5000 negative	961	150	292 4	00 0.21	0.015	0.61	0.022	0.82 0	0.027 489	1900 <10000		2024A&A683A21M 2020ApJ90532B					A lot like HM Cnc, ultra-compact DD in direction of LMC
TF J0546+3843		08 +38 43 13.44			91072 0.00		Ĺ		Ĺ	19.31		201	150		00 021	0.013	0.01	0.022	0.02	7.027 40.	10000		2024arXy/2411127960					Chirp mass known with Pdot, masses of each stars are discussed in paper and are obtained with some
TF J1858-2024		62 -20 24 48 60					N	Y	ь																			assumpoons models  Chirp mass known with Pdot, masses of each stars are discussed in paper and are obtained with some
TF J1858-2024 TF J2243+5242	18 58 05.9t 22 43 42.97.	52 -20 24 48.60 2 +52 42 06.00 92 +24 56 43.32	Y 0.006027708 Y 0.006110356644		989952 0.00 913567 0.000		N Y	Y	D Y	19.37 20.55					0.349	0.09	0.384	0.11 0	0.733 0	0.142 222	200 1620	10	2024arXiv2411127960 2020ApJ905L7B					assumptions/models
/407 Vul	19 14 26.0	92 +24 56 43.32 36 -09 24 31.64	N 0.006585648148 N 0.007175925926	9.4833	333333		N	N		19.36															2011MNRAS 413 3068C			AM CVn
ES Cet ND J0651+2844	06 51 33.3	4 +28 44 23.4	Y 0.008856557211	1 12.753		6.40E-10	N N	Y	Y	19.3	992.9	616.9	5		0.26	0.04	0.5	0.04		0.057 165	1530 870	0 6.76	2011ApJ737L23B	2012ApJ757L21H	2011MNRAS.413.3068C			AM CVN SDSS J065133.33+284423.3
ZTF J0538+1953		3 +19 53 02.89			14.44	0.00051	Y	Y	Y	18.8	1039.8	198.5	3.2		0.32	0.03	0.45			0.058 260		6.96	2020ApJ 90532B					
ND 0931+444 SDSS J232230.20+05094	12	3 +44 11 06.9				0.00051	0.0142 N	N	Y	17.8					0.312	0.019	0.75				660		2014MNRAS.444L1H	C 2016ApJ82446B				SDSSJ09351 SDSSJ09351 He+He white dwarf LISA verification binary, a source class that is predicted to account for one-third of resolved LISA ultra-compact binary detections.*
06 10526+5934	23 22 30.2 05 26 10 4	+05 09 42.06	Y 0.01390046296 N 0.01424044625	5 20.016 5 20.50		0000053 N	N N	N N	D	18.7 17.56	865.2 847.5	148.6 565.2	6.3		0.27	0.06	0.24	0.06	0.51 0	0.085 19	1160	7.17 6.213	2020ApJ 892L 35B 2024NatAs 8 491L	2023An   959 114K	2024A&A . 686A 221R			to account for one-third of resolved LISA ultra-compact binary detections."  WD+Subdwarf or DWD
PTF J0533+0209	05 33 32.0	6 +02 09 11.51	Y 0.01430555556		20.6		N N	N	D	19	1265.5	618.7	6.9		0.167	0.03	0.652	0.04	0.819	0.05 200	000		2020ApJ 90532B	2020400	202410010004.22111			DBA spectroscopic feature
ZTF J2029+1534 J1239-2041		11 +15 34 30.97 7 -20 41 42.28	Y 0.01451388889 Y 0.01563	3 2	20.9 2.5072	0.00013	Y N	Y 2	D	20.5	8063.1 824	557.2	10.4		0.3 0.291	0.04	0.32	0.04 #VAL	0.62 0		1250 1530 1575	6.939	2020ApJ 90532B 2022ApJ 93394B					
ZTF J0722-1839	07 22 21.4	9 -18 39 30.57	Y 0.01645833333	3	23.7		Y	Y	D	19.1	1429.4				0.33	0.03	0.38	0.04	0.71	0.05 199	900 1680	10	2020ApJ 90532B					i = 89.66
ZTF J1749+0924 SDSS J063449.92+38035	22	+09 24 32.4			26.4		Y	Y			negative				0.28	0.05	0.4			0.086 204			2020ApJ 90532B					
2	06 34 49.9	+38 03 52.45			26.5		N	N	Y	17.1		132.1	6		0.452	0.07	0.209			0.078 273			6.72 2021ApJ 918L 14K					
SMSS J033816.16- 813929.9 J2322+2103		-81 39 30.06		5	30.6 31.968	0.00025	?	N	D	17.3	533.0 884	379.7 248.1	4.6		0.23	0.015	0.38	0.05	0.61 0	0.052 181		6.765	7.5 2021ApJ 918L 14K 2022ApJ 933 94B					SDSS J033816.16-813929.9
ZTF J1946+3203	19 46 03.8	9 +32 03 13.13	N 0.02330811817	7 33.563	369017		N N	Y	ь	19.2	5225.3	284.8	4.8		0.307	0.097	0.272	0.046	0.579 0	0.107 280	1000 1150	00	2020ApJ 90532B					unclear if DWD or not
VD J0106-1000		9 -10 00 03.3		3 39.	10032	0.00002	N	N	D	19.9		395.2	3.6		0.188	0.011	0.57		0.758		485	6.01	2011MNRAS.413L.101					Problem with SIMBAD coords / IDs
VD J1630+4233 SDSS082239+304857	08 22 39.5	8 +42 33 05.8 5 +30 48 57.2		7 40	0.2768	0.000043	N N	N Y	D	19.2	880.5	295.9 415.7	4.9 22.7		0.298	0.019 0.014	0.76 0.524	0.05 (		052 140	670 1000 520	7.05	2011MNRAS.418L.157 2017ApJ84710B	K 2016ApJ82446B 2021MNRAS.500.5098	к			
11526-2711 TF J1901+5309		15 -27 11 56.660 2 +53 09 29.27				0.000439	N	?		18.3	621.1	336	5.6		0.37	0.02 >	0.4	0.02 #VAL	UEI 0	0.052 140 0.028 174 0.071 260	460	7.31	2023ApJ 950 141K 2020MNRAS 494L 91	C 2020ApJ90532B			ELM	
2049+3351	20 49 51.2	2 +53 09 29.27 74 +33 51 53.126				0.000007	Y N	Y		18.7	910.9	513.2	9.5		0.36	0.05	0.36	0.05	0.72 0	0 23		10	2020MNRAS.494L91 2023ApJ950141K	C 2020ApJ90532B			ELM	
SDSS J104336.28+05514	10	8 +05 51 49.9			45.648	0.00092	?	N			negative	115.2	6.8		0.183	0.01 >	0.07	#\\Z\	UEI	0.01 99		6.6	2017ApJ84710B					
J1506-1125	15 06 12.3	45 -11 25 11.994	N 0.03232	2 46	6.5408	0.00039	N	7		17	413.2	167.5	4.3		0.43	0.02 >	0.18	0.01 #VAL		0.022 220	9050	7.44	2023ApJ 950.141K				ELM	
WDJ 022558.21-692025.3 J1235+1543		11 -69 20 25.38 +15 43 19.4			023679 0.000 2.8768	0.0000002	N N	Y 2	D+	16.4	402.6 444.4	224 166.5	4.4 6.2		0.4	0.04	0.28 un 17	0.02 #VAL		0.045 250		6.99 7.19	7.6 2023MNRAS.525.1814 2017MNRAS.468.2910		ĸ			SDSS J123549.88+154319.3
ZTF J2320+3750	23 20 20.4	3 +37 50 30.84	Y 0.03836573843	3 55.246	966333		N N	N		19.4	1443.4	466	9		0.2	0.01	0.69	0.03	0.89 0	0.032 92	200		2020ApJ 90532B					
WD J1053+5200 J0056-0611	10 53 53.8 00 56 49 °	9 +52 00 31.0	Y 0.04256 Y 0.04338	6	1.2864	0.00002	N N	N 2		19.1	3816.9 625.9	264 376.9	2.4		0.204	0.012	0.75	0.14	0.954	0.24 15	180	6.55 6.167	2009ApJ707L51M 2013ApJ76966B	2010ApJ716122K 2016ApJ82446B	2010ApJ723.1072B	2016ApJ82446B		WD 1050+522 (SDSS J105353.89+520031.0)
SDSS J1056+6536	10 56 11.03	3 +65 36 31.5	Y 0.04351	1 62	2.6544	0.00103	N	N N		19.9	1510.4	267.5	7.4		0.334	0.016	0.76	0.24	1.094 0	0.241 204	1470	7.13	2012ApJ751141K	2016ApJ82446B				
J0923+3028 WD J1436+5010		0 +30 28 05.08 8 +50 10 26.9		5 6		0.00049	N 2	?	D	15.7		296 347.4	3 8.9		0.275	0.015	0.76				1350 1550	6.63	2010ApJ723.1072B 2010ApJ716122K	2011ApJ7273K 2016ApJ82446B	2016ApJ82446B			Also WD 0920+306 WD 1434+503
J1832+2031	18 32 36.5	39 +20 31 08.202	N 0.046641	1 67.	.16304 0	0.000002	N	?		17.6	621.1	335.2	4.2		0.29	0.03 >	0.47	0.02 #VAL	UE! 0	0.036 190	080	6.74	2023ApJ 950.141K	2010Арл62440В			ELM	WD 14347503
J1738+2927 ND J0825+1152	17 38 35.4	7 +29 27 50.63	Y 0.0477	7 6		0.00011	N	?		19.3	780.0	372.7 319.4	13.2		0.261	0.016 >	0.55	#VAL	UEI 0	0.016 120	1018	6.972	2020ApJ 889 498	2016ApJ82446B				
1812+0525	18 12 38.4	71 +05 25 29.868	N 0.059847	7 86.	.17968 0	0.000083	N N	?		18.9	1176.5	373.3	6.2		0.278 0.28	0.021	0.8 0.73	0.22	1.078 0 1.01 0	0.221 248 0.058 88	1830 1960	6.61 5.96	2012ApJ751141K 2023ApJ950141K				ELM	
VD0957-666 VD J1741+6526		4 -66 53 10.2 9 +65 26 38.7	Y 0.06099312	2 87.83	7.9984 0.0	0.00001	Y	N		14.5	163.6 1154.0	218.4 508	1.1	146.3	5 0.37 0.17	0.01	0.32 1.17		0.69	0 300	1000 1100 1790	5.19	1997MNRAS.288.538 2012ApJ744.142B	M 2002MNRAS.332745I 2016ApJ82446B	d .			
0221+1710	02 21 10.8	32 +17 10 49.182	N 0.0612853495	88.250	90328 0.000		N N	Y		17.7	279.3	360	4		0.262	0.017	0.615	0.016	0.877 0	0.023 130	090 420	0 6.95	8.04 2023ApJ 950 141K	2016ApJ82446B 2025arXiv250515580V			ELM	Also ZTF J0221+1710
12013-1310 ND J0755+4906		98 -13 10 41.750 0 +49 06 27.9			.72992 C	0.000597	N	?		18.7	452.5 negative	300.9 438	6.5		0.37	0.02 >	0.51		UEI 0		1200	7.42 5.84	2023ApJ 950.141K 2010ApJ 723.1072B	2016ApJ82446B			ELM	
1758+7642	17 58 12.8	47 +76 42 16.80 6 +39 52 37.63	N 0.0656667	7 94.56		0.00213	N N	Y		40	040.0		ь						0	0			2010ApJ /23.10/28 2022MNRAS.509.4171					Needs RVs. DWD HR position. ELM binary/DWD binary. No secondary eclipse detection. ID spectra only
SDSS J1337+3952 I1313+5828	13 37 25.2	96 +39 52 37.63 976 +58 28 01 39	N 0.0656667 Y 0.06875 Y 0.07395	5	99	0.00018	Y	N	D	16.6	113.6	100 321 7	4 65	168	3 0.51 0.271	0.01	0.32	0.01	0.83 0	0.014 90	1390 794 1610	0 7.85 6.938	7.32 2021ApJ 921160C					SDSS Chandra
ND J2338-2052	23 38 21.5	0 -205222.8	Y 0.07644	4 110	0.0736	0.00712	N N	? N		19.9	655.0	133.4	6.5 7.5		0.258	0.015	0.75	0.24	1.008	0.24 166	630	6.869	2022ApJ 933 94B 2013ApJ 769 66B	2016ApJ82446B				
12309+2603		0 +26 03 46.7	Y 0.07653			0.00001	N	N		19.3		412.4	2.7		0.176	0.01	0.96	0.16	1.136	0.16 109		6.127	2016ApJ818155B	2016ApJ82446B				
ND J0849+0445 ND0019-105	08 49 10.1	3 +04 45 28.7	Y 0.0787 Y 0.0799	7 1	13.328	0.0001	? N	?		19.3	1783.8	366.9 145.6	4.7 5.6		0.179	0.01	0.86	0.19			1290	6.23 7.15	2010ApJ716122K 2011ApJ7273K	2016ApJ82446B				Also J0022-1014
0751-0141	07 51 41.1	8 -014120.9	Y 0.0800126	115.2	218144 0	.0000004	N	Y		17.6	1785.5	432.6	2.3		0.194	0.02	0.97	0.03	1.164 0	0.036 157	750	5.54	2013ApJ76966B	2014MNRAS.438L.266	C 2016ApJ82446B			SDSS J075141.18-014120.9. Eclipsing but 0.1mag variability and very small depth eclipses
J1657-0417 J1121+6052		88 -04 17 22.348 63 +60 52 10.265				0.000441	N N	?		18.3	490.2 751.9	289.4 183.5	2.6		0.27 0.19	0.02 > 0.01 >		0.03 #VAL 0.01 #VAL		0.036 177	750 1690	6.85 5.41	2023ApJ 950 141K 2023ApJ 950 141K				ELM ELM	
J2149+1506	21 49 11.10	07 +15 06 37.71	Y 0.08541	1 12	2.9904	0.00016	N	?		18.1	1055	290.3	12		0.267	0.032 >	0.51	#VAL	UEI 0	0.032 21	1164	6.595	2022ApJ 933 94B					
J0501-2312 J2119-0018		65 -23 12 04.397 -00 18 25.8	N 0.086593 Y 0.08677	3 124. 7 124		0.001156	N 2	?		20.3	609.8	105.1 383	5.1		0.36	0.01 >	0.14			0.014 214	440 1360	7.21 5.36	2023ApJ 950.141K 2010ApJ 723.1072B	2016ApJ82446B			ELM	
10930-8107	09 30 08.4	7 -81 07 38.32	Y 0.08837		7.2528	0.00005	N	?		16.25		212	9		0.238	0.01 >	0.29	0.03 #VAL		0.032 233		6.14	2020ApJ 894 53K					
J1234-0228 J1808+2723	12 34 10.3 18 08 38.9	7 -02 28 02.9 94 +27 23 12.216	Y 0.0914 N 0.098787	4 13 7 142	31.616 .25328 0	0.004	N N	?		15.5		94 187.2	2.3		0.227	0.014	0.75	0.24 0 0.02 #VAL	UEI 0	0.045 106	1630	6.64	2011ApJ7273K 2023ApJ950141K				ELM	
J1152+0248		9 +02 48 14.4			.80848 0	0.000012	Y	Y		18.5	631.7	190.6 220.8			0.362	0.014	0.325		0.687 0	0.019 208		0 7.344	7.386 2016MNRAS.458.845	H 2020NatAs4.690P			FIM	Pulsating WD. Double lined in Parsons 2020
J2102-4145 J1632+4936		56 -41 45 01.736 94 +49 36 14.60				0.00016	N N	?		15.8	164.7	220.8	7.2	184.6	0.8 0.375 0.269	0.01	0.314	0.01 0	0.689 0 .UE1 0	0.014 136 0.021 91	1688 1295 1156	52 7.36 5.746	7.32 2023ApJ 950 141K 2022ApJ 933 94B	2024A&A685A9A			ELM	
1054-2121	10 54 35.7	8 -21 21 55.9	Y 0.10439	9 150	0.3216	0.00655	?	?		18.7	1742.3	261.1	7.1		0.178	0.011	0.77	0.24	0.948	0.24			2016ApJ 824 46B					
10725-1245 11237+4913	12 37 28 7	162 -12 45 46.824 +49 13 02 7	N 0.106135 V 0.10763	5 152	2.8344 C	0.000061	N N	?		18.9	959.4	79.6 143.6	10.5		0.42	0.02 >	-0.12 -un 25	0.01 #VAL	UEI 0	0.022 219	920 450	7.42	2023ApJ 950.141K	ik			ELM	SDSS_1123728 64+401302 6
12243-4511	22 43 27.4	79 -45 11 18.404	N 0.109479	9 157.	.64976 0	0.000043	N	?		17.4	389.1	249.4	4.9		0.29	0.01 >	0.46	0.02 #VAL	UEI 0	0.022 158	880	7.04	2023ApJ 950.141K				ELM	
0745+1949 1401-0817	07 45 11.56 14 01 18 8	6 +19 49 26.6 0 -08 17 23.43	Y 0.1124 Y 0.11299	4 16 9 163		0.00833	? N	?		16.4 16.5	919.0 555.0	108.7 346.2	2.9		0.164 0.216	0.01	0.15	0.34 0			1380 1813	6.21 5.731	2014ApJ781104G 2020ApJ88949B	2016ApJ82446B				
SS 41177	10 05 59.10	0 +22 49 32.2	Y 0.116015	5 167	7.0616		Y	Y		17.4	434.5	176.1	1.1	10.4	1 0.378	0.02	0.316	0.01 0	0.694 0	0.022 244	407 1167	7.321	7.307 2014MNRAS.438.3396	В				Has ultracam data, no pulsations to 0.5% amplitude
J2303-2614 ND1242-105	12 44 52 6	42 -26 14 59.917 6 -10 51 08.7	Y 0.118765		0.2008 0 1.0216	0.000032	N Y	?		13.8		302.9 124	1.2	178	0.18	0.01 >	0.58	0.01 #VAL			1280 1935 843	5.43 84 7.94	2023ApJ 950.141K 7.54 2015AJ 149 176D				ELM	
1048-0000	10 48 26.8	6 -00 00 56.81	Y 0.12063	3 173	3.7072	0.00001	N	7		18.3	707.0	312.8	8.1		0.169	0.016 >	0.62	#VAL	UEI 0	0.016 84	484	5.831	2020ApJ 88949B					
1108+1512 1115+0246	11 15 27.3	1 +15 12 46.7 1 +02 46 21.86	Y 0.1231 Y 0.12405	1 17	77.264 78.632	0.00867	7 14175 N	?		18.8	899.0	256.2 139.9	3.7 12.2		0.179	0.01 >	0.78	0.22 0	UEI	0.22	182	7.439	2016ApJ 824 46B 2020ApJ 889 49B					
0338+4134	03 38 47.0	68 +413424.10	Y 0.1253132	2 180.4	451008 0	.0000001	N	N		15.1	596.0	289	4		0.22	0.05 -	0.7	#VAL	UEI	0.05 225	500	5.6	2022ApJ 9365W	2023MNRAS.526.5471	Y			SubdwarfDWD. More likely DWD. LAMOST J033847.06+413424.2
2147+1859 0642-5605		8 +18 59 59.76 9 -56 05 47.44	Y 0.12879 Y 0.13189			0.00002 0.00006	N N	?		19.6	2199.0 704.225352	198.3 368	6.6		0.157 0.182	0.021 >		#VAL 0.17 #VAL			1618 1460	5.639 5.08	2020ApJ 88949B 2020ApJ 89453K					
2257+3023	22 57 02.14	41 +30 23 38.50	Y 0.13489	9 194	4.2416	0.00016	N	?		18.3	277	226.3	3.2		0.334	0.016 >	0.47	#VAL	UEI 0	0.016 99	1947	7.324	2022ApJ 933 94B					
0545-1902 VD 1101+364	05 45 45.3	01 -19 02 45.496 8 +36 10 49 0	N 0.144472 V 0.144719	2 208		0.000684	N	?		17.3	386.1 87.3	134.7 69.7	5.4	an 3	0.4	0.02 >	0.22	0.02 #VAL	UE1 0	0.028 228	1850	7.34	2023ApJ 950.141K				ELM	Cores same strength; similar temperatures for each star. Need to check which is youngest. PG1101+364
VD1704+481	17 05 30.4	4 +48 03 12.4	Y 0.1447864	4 208.4	92416 0	0000025	Y	N N		14.6	87.3 39.4		1.7	-04.3	0.39	0.05	0.56	0.07	0.95	0.086			2000MNRAS.314334	M				Triple WD PG1101+364
0112+1835 0151+1812	01 12 10.2	5 +18 35 03.8 8 +18 12 47.95	Y 0.14698	3 21		0.00003	N	?		17.4 19.6	756.8	295.3 259.8	2		0.16 0.154	0.01	0.74	0.15			1690 1879	5.63	2012ApJ744142B 2020ApJ88949B	2016АрЈ82446В				
0923-1218	09 23 50.3	2 -12 18 24.00	Y 0.14896	3 214	4.5024	0.00002	N N	?		16.3	262.0	117	3.5		0.344	0.023 >	0.19	#VAL	UEI 0	0.023 194	455	6.328 7.17	2020ApJ 889 498					
1233+1602	12 33 16.2	0 +16 02 04.7	Y 0.1509	2	17.296	0.00009	?	?		20.1	675.7	336	4		0.169	0.01	0.98	0.16	1.149	0.16 109	1920	5.12	2010ApJ 723.1072B	2016ApJ82446B			ELM	
1459-1920 1130+3855	14 59 02.1	59 -19 20 33.552 6 +38 55 50.1	Y 0.15652 Y 0.1664914	2 218	5.3888	0.00003	N N	?		18.1		287.8 284	7.4 4.9		0.26 0.288	0.02 >	0.9		1.188 0	0.045 87 0.181	1740	5.66	2023ApJ 950 141K 2016ApJ 824 46B				ELM	
D 251 2342+0811	23 34 20.8	6 +38 55 50.1 6 +29 18 36.6 +08 11 37.5	Y 0.1664914 Y 0.16788	4 239.7	747616 0.	0.000007	N	N		19.6	675.0 245.9 574.7	128.3	10.9		0.288 0.39 0.42	0.02 >	0.322	#VAL	UEI	0 0.02 220	10.70	7.45	1995MNRAS.275.828 2017MNRAS.471.4218	M				WD2331+290 SDSs_0234248_86+081137.3
1112+1117	11 12 15.83	3 +11 17 44.9	Y 0.17248	3 248	8.3712	0.00001	N ?	7		16.3	363.5	116.2	10.9		0.176	0.01	0.75	0.24	0.926	0.24			2016ApJ 82446B	in.				0.000 3.234.240.00*100 1137.3
1553+6736	15 53 28.0	08 +67 36 10.560	N 0.174522	2 251.	.31168 0	0.000431	N	?		16.5	423.7	91.6	5.4		0.22	0.04 >	0.12	0.01 #VAL	UEI 0	0.041 96	610	6.11	2023ApJ 950 141K				ELM	
0650-4925 DSS1005+3550	10 05 54.0	8 -49 25 49.46 5 +35 50 14.4	Y 0.17652	2 254		0.00028	N N	? N		17.07	1041.66666 1763.6	284.2 143	39.4 2.3		0.182 0.168	0.01 >	0.75		0.918	0.24 100	1210	5.47 5.82	2020ApJ 894 53K 2012ApJ 751 141K	2016ApJ82446B				
0818+3536	08 18 22.3	5 +35 36 18.7	Y 0.18315	5 26	63.736	0.0211	7	?		20.8	negative	170	5		0.165	0.01	0.75	0.24	0.915	0.24 108	620	5.69	2010ApJ 723.1072B	2016ApJ. 824. 46B				
0101+0401 IDSS1257+5428	01 01 28.6 12 57 33 F	9 +04 01 59.00 5 +54 28 50.5	N 0.18332 Y 0.18979154	2 263		0.00284	N Y	? N		17.2	1245	199.5	7.1		0.188	0.013 >	0.35	#VAL		0.013 92	284 200 980	5.229 10 6.9	2022ApJ 933 94B 9 2009ApJ 707 971B	2010ApJ719.1123K	2011ApJ73695M			Claims in literature of potential magnetism, but rapid rotation seems more likely
/D J1443+1509	14 43 42.7	6 +15 09 38.9	Y 0.19053	3 274	4.3632	0.02402	?	?		18.6	705.5	306.7	3		0.201	0.013	0.99	0.15	1.191 0	0.151 88	810	6.32	2012ApJ 744 142B	2016АрЈ82446В				an promotion regulation, was repeat or monthly stately
130+5321 450-0145		7 +53 21 38.37 08 -01 45 48.150		5 27	76.552 .72336	0.0002	N N	?		14.3	85.0 1098.9	209.1 260.2	5.1 3.3		0.191	0.013 >		#VAL 0.02 #VAL		0.013 92 0.028 95	1231 1560	6.627 5.58	2020ApJ 889 49B 2023ApJ 950 141K				ELM	
DSS2103-0027	21 03 08.7	9 -00 27 48.9	Y 0.20308	3 292	2.4352	0.00023	N N	N		17.7	1078.2	281	3.3		0.161	0.02 >	0.88	0.19	1.041	0.19 100	1000	5.49	2012ApJ751141K	2016ApJ82446B				
E0225-1912 1238+1946	02 27 41.4	3 -18 59 24.5	Y 0.22 Y 0.22275	2	316.8	0.00009	Y	?		16	155.0	258.6	2.5		0.55 0.21	0.011	0.23		0.78	0 204	1488 1170	7.84 5.275	2020A&A638A.131N 2013AoJ76966B					In SPY. WD0225-192
J1249+2626	12 49 43.5	7 +26 26 04.3	Y 0.22906	321	9.8464	0.00112	N N	?		16.7	808.2	191.6	3.9		0.16	0.01	0.76	0.23	0.92	0.23 10	1120	5.72	2015ApJ 812.167G	2016ApJ82446B 2016ApJ82446B				
J1625+3632 NLTT 11748	16 25 42.11	1 +36 32 19.1	Y 0.23	3	331.2	0.04	?	?		19.6	2466.9	58.4	2.7		0.2	>	0.07	#VAL	UE!	0 235	1570	6.12	2011ApJ7273K					
NLTT 11748 WD J1840+6423		3 +17 48 08.7 7 +64 23 12.2	Y 0.23550606 Y 0.23672	339.12	287264 0.0 0.8768	0.00005	N ?	Y 7		16.6	770.3	273.4 279.7	0.5 4.1		0.153 0.182	0.007	0.729	0.008 0	1.042	0.19 91	705 759 1140	6.16	8.22 2010ApJ 716L 146S 2012ApJ 744 142B	2014ApJ780167K 2016ApJ82446B				i=89.9. First detached and eclipsing DWD binary (WD 0342+176). Roomer delay measured
J1708+2225		6 +22 25 51.07				0.00024 1	.00795 N	?		19.1		115.5	8.5		0.32	0.011 >		#VAL			343	6.865	2020ApJ 889 49B					

										Verific Binary/ LISA		Nistance pc, 1/p.																Discovery DBL	
Unique ID	RA	De		ecureDWD inary? Period (d			Period error Alia	Doub ises lined	ole ? Eclipsi	LISA ing Detectable		pc, 1/p. old for terature) K1	(km/s) K1 erre	or K2 (km/s)	K2 error		error M2	M2 er		Mtotal error	T1	T2	Logg1 Log		Ref 2	Ref 3	Ref 4	(SPY/ELM to include, incomplete)	Comment
J2104+1712 J1129+4715	21 04	3.842 +1 4.162 +4	17 12 32.17 Y 47 15 01.726 N		0.2375	342 343.90512	0.00022	N N	?		18.2	357 847.5	286.6 185.8	4.4		0.183	0.01 >0.86		#VALUE 0.02 #VALUE	0.02	01 8927 22 11610	)	6.561 5.32	2022ApJ 933 94B 2023ApJ 950 141K				ELM	
WD J0822+2753	08 22	2.58 +2	27 53 07.4 Y		0.244	351.36	0.0002	?	?		18.3	589.8	271.1	9		0.191	0.012	0.93	0.17 1.1	21 0.1			6.44	2010ApJ 716.122K	2016ApJ82446B				
GALEX J1717+6757 J1631+0605			67 57 11.4 Y 06 05 33.8 Y		0.246137	354.43728 356.7744	0.000003	N N	Y N		13.3 19.3	178.6 961.1	215.4	3.4		0.18		0.9	0.23 0.9	08 0.0 52 0.2			5.67 5.818	2011ApJ737L_16V 2016ApJ_818155B	2014MNRAS.444.1674 2016ApJ82446B	4			
J1526+0543	15 26	1.57 +0	05 43 35.4 Y		0.25039	360.5616	0.00002	?	?		19	3144.2	231.9	2.3		0.161	0.01	0.81	0.21 0.9	71 0.2	10290	)	5.69	2015ApJ812167G	2016ApJ82446B				
J0517-1153 J2132+0754	21.32	8.36 +0	11 53 25.849 N 07 54 28.3 Y		0.250521	360.75024 360.8064	0.000001	N N	?		16.2	680.3 1221.3	309.7 297.3	3.1		0.19	0.02 >1.07	1.07	0.04 #VALUE	9 0.04	15 16650 13 13700	)	5.96 5.995	2023ApJ 950 141K	2016ApJ82446B			ELM	
J2132+0754 J1141+3850	11 41	5.56 +3	38 50 03.1 Y		0.25056 0.25958	360.8064 373.7952	0.00005	N	?		18.3 19.2	1516.1	265.8	3.5		0.187 0.177		0.92	0.13 1.2 0.17 1.0	57 0.1 97 0.1	13 13700 17 11620		5.995 5.307	2013ApJ 769 66B 2013ApJ 769 66B	2016ApJ82446B				
J0256+4405 J1630+2712			44 05 27.363 N 27 12 26.6 Y		0.26126	376.2144 398.1024	0.000087	N ?	?		15.8 20.3	714.3 6978.2	243.7 218	3.8		0.22	0.02 >0.68 0.01		0.03 #VALUE 0.22 0.				5.56 5.95	2023ApJ 950 141K 2010ApJ 723 1072B	2016ApJ82446B			ELM	
HE2209-1444	22 12	7.96 -14	14 29 46.0 Y		0.276928	398.77632	0.000006	Υ	N		15	38.0				0.58	0.03		0.08 1.	16 0.08	85 8490	71	140 7.97	7.97 2003A&A410663K					In SPY
J2306+0224 J1557+2823			02 24 29.61 Y 28 23 36 1 Y		0.28728	413.6832 416.4624	0.00009	0 677 2	?		16.9 17.8	1105 247.0	148.3	6.7		0.201	0.015 >0.28 >0.43		#VALUE		0 1255		5.473 7.762	2022ApJ 933 94B 2013ApJ 769 66B					
J1449+1717	14 49	7.15 +1	17 17 29.3 Y		0.29075	418.68	0.00001	N	?		17.7	613.4	228.5	3.2		0.171	0.01	0.83	0.21 1.0		21 9700	)	6.08	2015ApJ 812 167G	2016ApJ82446B				
J0042+3103 J1555+1007			31 03 29.45 Y 10 07 24.851 N		0.29725	428.04 429.17328	0.00018	N N	?		18.2	545.0 396.8	204.2 148.5	5.2 6.7		0.176	0.01 >0.49 0.02 >0.38		#VALUE			)	6.274 7.32	2020ApJ 889 49B 2023ApJ 950 141K				ELM	
WD2020-425 J0834+3049			12 24 25.8 Y 30 49 59.2 Y		0.3	432 433.1376	0.02	Y	?		14.8	98.8 756.9	179.3	13.9		0.81	0.01 >=0.47	0.54	#VALUE		0 28412	2	8.145	2007ASPC. 372. 387N 2017MNRAS. 471. 421		2020A&A638A.131N			In SPY, High mass. SDSS J083448.91+304959.2
SDSS1005+0542	10 05	8.09 +0	05 42 04.4 Y		0.30079	440.064	0.00011	N N	? N		19.1	1640.0	208.9	13.9		0.29	>0.66		#VALUE	9	0 15740		7.06 7.25	2012ApJ751141K	к				SDSS J083446.91+304959.2
J1545+4301			43 01 41.85 Y		0.30931	445.4064	0.00016	N	?		19	939.0	154.8	4.1		0.174	0.01 >0.3		#VALUE				6.222	2020ApJ 889 49B					
J0820+4543 SDSS0917+4638	08 20	0.339 +4 9.55 +4	45 43 01.70 Y 46 38 21.7 Y		0.31553	454.3632 455.6448	0.00042	N 7	7		17.9 18.9	388 2222.0	153.1 148.8	3.7		0.412		0.75	#VALUE 0.23 0.9	0.01 23 0.2	16 17356 23 11850	)	7.458 5.55	2022ApJ 933 94B 2010ApJ 723 1072B	2016ApJ82446B				
PG1114+224 SDSS J0152+0749	11 17	3.61 +2	22 06 31.9 Y		0.32 0.32288	460.8 464.9472	0.015	?	?		16.3	260.1 976.9	34	7		0.41	>0.07	0.82	#VALUE	89 0.2	0 25860	)	5.8	2011ApJ73067B					
J1906+6239			07 49 14.1 Y 62 39 23.71 Y		0.32288	464.9472 474.3216	0.00014	? N	7		17.6	246	217	3		0.169	0.04 >1.06	0.82	#VALUE	0.0	13570	)	5.341	2012ApJ 744 142B 2022ApJ 933 94B	2016ApJ82446B				
J0116+4249	01 16	0.83 +43	42 49 38.32 Y		0.334	480.96	0.00015	N	?		18.3	4506	237.8	4.6		0.256	0.028 >0.81		#VALUE	0.02	28 12968	В	5.058	2022ApJ 93394B					
J0155-4148 WD0455-295	04.55	5.90 .29	11 48 18.433 N 29 28 59.0 Y		0.343865	495.1656 516.096	0.000317	N Y	?		15.7	480.8 97.4		3.7		0.22	0.02 >0.67	0.44	0.03 #VALUE	84	0		5.75	2023ApJ 950 141K 1994ApJ 429 369W	2020A&A638A.131N			ELM	In SPY, DA+DBA. Still one close alias to be settled I think? WD0453-295
J0050+2147	00 50	6.85 +2	21 47 25.66 N		0.3584 0.36059	516.096 519.2498	0.00002	N	?		20.1	4102.0		6.6		0.186	0.01 >0.46		#VALUE	0.0			5.826	1994ApJ 429 .369W 2020ApJ 889 49B					
J1255-1853 J2332+0427			18 53 32.101 N 04 27 35.20 Y		0.363739	523.78416 529.8048	0.001501	N N	?		17.8 18	1818.2 1087.0		6.2 4.9		0.19	0.01 >0.73 0.01 >0.61		0.04 #VALUE			7	5.25 5.834	2023ApJ 950 141K 2020ApJ 889 49B				ELM	
J0215+0155	02 15	6.244 +0	01 55 03.363 N		0.387941	558.63504	0.000001	N	?		14.3	465.1	186.4	1.5		0.29	0.02 >0.58		0.02 #VALUE	0.02	28 11310		5.34	2023ApJ 950.141K				ELM	
WD0028-474 J0500-0930	00 30 05 nn	7.17 -47	7 12 36.4 Y 9 30 56.98 Y		0.389575	560.988 567.864	0.0003	Y N	N N		15.2	96.5	146.8	8.3		0.6	0.06 0	0.45	0.04 1. 0.04 #VALUE		72 18500 11 10810	170	6.39	2017MNRAS.466.157 2020ApJ 894 53K	R			ELM	In SPY Relativistic beaming in TESS data. 0.1% level
J1046-0153	10 46	7.87 -01	1 53 58.5 Y		0.39539	569.3616	0.10836	0.659 N	?		18.2	383.2	80.8	6.6		0.37	>0.19		#VALUE	9	0 14880	)	7.37	2013ApJ 769 66B				_	V
J2245+0750 J1240-0958			07 50 48.74 Y 09 58 59.603 N		0.39664	571.1616 576.55152	0.00102	N N	?		19.6 19	1547.0 769.2	220.5 209.8	10.1 6.1		0.178	0.01 >0.7 0.02 >0.65		#VALUE		01 10782 15 14020	2	6.184 5.24	2020ApJ 889 49B 2023ApJ 950 141K				ELM	
J1617+1310	16 17	2.51 +13	13 10 18.9 Y		0.41124	592.1856	0.00086	?	?		18.9	1052.8	210.1	2.8		0.172	0.01 0	0.85	0.2 1.0	22 0	.2 10510	)	6.07	2015ApJ 812.167G	2016ApJ82446B				
J1538+0252 J0027-1516		4.22 +0	02 52 09.6 Y 15 16 26.57 Y		0.41915	603.576 611.3952	0.00295	0.295 ? N	?		18.8	1408.4 518.0	227.6 155.4	4.9 6.3		0.168	0.01 0.36	0.92	0.17 1.0 #VALUE		17 11560	ı	5.967 6.127	2013ApJ 769 66B 2020ApJ 889 49B	2016ApJ82446B				
WD1013-010	10 16	6.87 -01	01 19 17.1 Y		0.43653	628.6032	0.00005	N	?		15.3	46.3	122	2		0.44	>0.38		#VALUE	9	0 8080	)	7.32	2005A&A440.1087N	2020A&A638A.131N				In SPY
J0212+2657 J0837+6648	08 37	8.51 +6			0.44908	646.6752 667.1376	0.00197	N 7	?		19.4 18	804.0 604.1	202 150.3	11.5		0.17	0.012 >0.62	0.76	#VALUE 0.24 0.9	0.01 41 0.2	12 9163 24 11400	3	6.518 6.31	2020ApJ 889 49B 2015ApJ 812 167G	2016ApJ82446B				
J0940+6304			63 04 27.4 Y		0.48438	697.5072	0.00001	N	N		19.9	4106.7		3.2		0.18	0.01	0.9	0.18 1.	08 0.1	18 12910	)	5.964	2016ApJ 818.155B	2016ApJ82446B				
J0022+0031 HE0410-1137		9.02 -11	00 31 15.5 Y		0.491	707.04 732.528	0.025	? Y	? N		19.5 15.9	631.4 105.3	80.8	1.3		0.38	>0.21 0.04	0.39	#VALUE	0.0	0 17890	190	7.38	2011ApJ7273K 2017MNRAS.466.157	R				In SPY. GD 57
J2151+2730	21 51	1.472 +2	27 30 14.45 N		0.51593	742.9392	0.00316	N	?		17	1546	203.9	6.7		0.189	0.01 >0.72		#VALUE	0.0	1190		5.257	2022ApJ 93394B					
HE1414-0848 J0840+1527	14 16	7.57 41	09 02 02.7 Y 15 27 04.5 Y		0.51781 0.52155	745.6464 751.032	0.00001	0.34 N	N 2		15.9 19.4 r	81.1	84.8	21		0.52	0.01	0.74 0.75	0.24 0.9		0 8900 24 13810	107	5.043	2002A&A 386. 957N 2013ApJ 769 66B	2016ApJ82446B				In SPY
J0745+2104	07 45	0.527 +2	21 04 31.37 Y		0.53964	777.0816	0.00511	0.343 N	?		18.6	747	132.2	4.6		0.192 0.397	0.016 >0.46	0.75	#VALUE	0.01	16 22614		7.329	2022ApJ 933 94B	2010402400				
J0755+4800 J0802-0955		9.48 +40 0.14 -09	48 00 34.1 Y		0.54627	786.6288 787.4928	0.00522 0.00455	0.349 N 1.17627 N	?		16.2	183.0 993.5	194.5 176.5	5.5 4.5		0.42	>0.90 0.012	0.82	#VALUE 0.21 1.0		0 19890 21 16910		7.455 6.423	2013ApJ 769 66B 2013ApJ 769 66B	2016ApJ82446B				
J1104+0918	11 04	6.75 +05	09 18 22.8 Y		0.55319	796.5936	0.00502	0.355 N	?		16.8	188.6	142.1	6		0.46	>0.55	0.02	#VALUE	1 0.2	0 16710	)	7.611	2013ApJ76966B	2010402400				In ELM survey. In SPY, low amp HS1102+0934
J1157+0546 J1518+1354		4.46 +0	05 46 45.6 Y		0.565	813.6 830.304	0.01925	1.23 N	?		20 r	egative 3798.9	158.3	4.9		0.17	>0.44	0.75	#VALUE 0.24 0.8	97 0.24	0 12100		5.054	2013ApJ 769 66B 2016ApJ 818 155B	2016ApJ82446B				
J1514-1436	15 14	7.26 -14	14 36 26.77 Y		0.58914	848.3616	0.00244	N N	7		18.27	754.38596	187.7	6.6		0.167	0.01 >0.63		0.06 #VALUE	0.06	9170		5.435 5.91	2020Ap.I 894 53K	2010нрз624408				
J2151+1614 WD J1518+0658		9.21 +10 6.69 +0	16 14 48.7 Y		0.59152 0.60935	851.7888 877.464	0.00008	?	?		16.9 17.5	391.2	163.3	3.1		0.181	0.01 0.013	0.8	0.22 0.9 0.2 1.0	81 0.2 54 0	22		6.66	2016ApJ 824 46B 2012ApJ 744 142B	2016ApJ82446B				
J0756+6704	07 56	0.71 +6	67 04 24.8 Y		0.61781	889.6464	0.00002	N	N		16.4	2065.4	204.2	1.6		0.182	0.011	0.95	0.16 1.1	32 0.1	16 11640	)	4.9	2015ApJ 812.167G	2016ApJ82446B				
J0130-0530 WD1210+140			05 30 25.72 Y 13 46 24.9 Y		0.63648	916.5312 924.3936	0.00072	N N	?		18.9	4834 211.5	191.2 131	5.7		0.299	0.053 >0.85		#VALUE		0 32127		5.42 6.92	2022ApJ 933 94B 2005A&A 440 1087N	2020A&A638A.131N				In SPY
HE2200-1341	22 03	5.63 -13	13 26 50.0 Y		0.6583	947.952		Y	?		15.4	138.2				0.46	>0.393		#VALUE	9	0 25261	1	7.52	2020A&A638A.131N					In SPY
J1151+5858 J2339-0347			58 58 53.4 Y 03 47 34.51 N		0.66902 0.67069	963.3888 965.7936	0.0007	N	N		20.3	930.7 1882.0	175.7 139.7	5.9		0.186 0.188	0.011 0	0.85	0.19 1.0 #VALUE				6.092 5.982	2013ApJ76966B 2020ApJ88949B	2016ApJ82446B				
J1236-0444	12 36	9.7 -04	04 44 37.9 Y		0.68758	990.1152	0.00327	N	?		17.29 5	23.560209	138	6.6		0.156	0.01 > 0.37		0.04 #VALUE	0.04	11			2020ApJ 89453K					
SDSS0730+1703 J0806-0716			17 03 56.9 Y 07 16 36.11 Y		0.6977	1004.688 1015.992	0.054 0.01554	N N	N 2		20 18.1	1329.8 1027	122.8 170.7	4.3 11.2		0.182	0.01 0	0.76	0.24 0.9 #VALUE				6.36 6.109	2012ApJ751141K 2022ApJ93394B	2016ApJ82446B				
WD 1534+503	15 36	5.83 +5	50 13 50.98 N		0.71129	1024.2576	0.01334	Y	?		15.8	68.2	135.9	3.2 86.4	3.2	0.392	0.07 0.		0.11 1.0	09 0.1	13 8900	85	1500 7.6	8.03 2003ApJ 596.477Z		C 2024MNRAS.532.2534N	4		Also called GD 347, WDJ153815.83+501350.98
WD 0311-649 SDSS0845+1624	03 12 2	3.03 +1	54 44 10.89 N 16 24 57.6 Y		0.73957 0.75599	1064.9808 1088.6256	0.0216	Y N	N N		13.3	36.6 584.3	86.5 62.2	2 60.1	2.1	0.385	0.063 0: >0.19	554	0.082 0.9 #VALUE		0 17750	123	7.55 7.42	7.91 2020MNRAS.493.280 2012ApJ751141K	к				
J1439+1002	14 39	8.40 +1	10 02 21.7 Y		0.77399	1114.5456	0.00169	?	?		18.1	726.1	177.9	6.2		0.181	0.01	0.78	0.23 0.9	61 0.2	23 14340	)	6.2	2010ApJ 723.1072B	2016ApJ82446B				
J1422+4352 J2339+2024			43 52 53.0 Y 20 24 44.84 Y		0.77399 0.79578	1114.5456 1145.9232	0.00169	? N	?		18.2	3214.9 1387.0	201.2 106.3	12.9		0.181 0.182	0.01 0	0.78	0.23 0.9 #VALUE				5.91 5.263	2010ApJ 723.1072B 2020ApJ 889 49B	2016ApJ82446B				
J0308+5140	03 08	8.19 +5	51 40 11.5 Y		0.8059	1160.496	0.00109	N	N		15.3	2278.1	78.9	2.7		0.151	0.024 >0.16		0.02 #VALUE	0.03	31 8380	)	5.51	2015ApJ 812.167G					
J0811+0225 J1039+1645	10 39	3.56 +0	02 25 56.7 N 16 45 24.3 Y		0.82194	1183.5936 1188	0.00049	N N	N N		18.8	1838.8	220.7 83.4	2.5		0.179	0.018 >0.31	1.28	0.1 1.4 #VALUE				5.794 7.639	2013ApJ76966B 2016ApJ818155B	2016ApJ82446B				
WD 1606+422	16 08	2.19 +4	42 05 43.44 Y		0.83935	1208.664	-	Y	N		13.8	43.3	123	1.7 92.7	1.5	0.458 0.57	0.02	0.45	0.02 1.	02 0.02	28 14000	110	1000 7.93	7.71 2020MNRAS.493.280	K 2024MNRAS.532.2534	М		DBL	Also EGGR 116. WDJ160822.19+420543.44
PG1519+500 HE0320-1917	03 22	1.93 -19	49 51 40.9 Y 19 06 48.1 Y		0.8603 0.86492	1238.832 1245.4848	0.00004	N N	N N		16.5 15.9	305.6 114.8	45 105	9		0.42	>0.14 >0.35		#VALUE	9	0 28730 0 13248		7.17	2011ApJ73067B 2005A&A440.1087N	2020A&A638A.131N				In SPY. WD0320-192
J2317+0602 J0125+2017	23 17	7.42 +0	06 02 52.09 Y 20 17 44.6 Y		0.86702 0.88758	1248.5088 1278.1152	0.00133 1	1.27191 N	?		19.5 17.4	558.0 4528.3	100.7 65.4	7.3		0.381	0.029 >0.38 0.01 >0.14		#VALUE	0.02	29 12043		7.441	2020ApJ 889 49B 2016ApJ 818 155B					
J1638+3500	16 38	6.27 +3	35 00 12.03 Y		0.90606	1304.7264	0.00004	N N	N 7		14.6	103.0	65.4 89.5	4.4		0.698	0.03 >0.45		#VALUE	0.0	37250		4.709 8.07	2020ApJ 889 49B					
J2348+2804	23 48	2.3 +2	28 04 38.41 Y		0.92013	1324.9872	0.01532	N	?		18.6	1365	89.3	12.2		0.22	0.037 >0.25		#VALUE	0.03	37 13906	3	6.204	2022ApJ 93394B					
J1241+0633 LP 400-22			06 33 51.0 Y 22 32 24.6 Y		0.95912 1.01016	1381.1328 1454.6304	0.00028	N N	N N		17.9 17.2	422.3 365.8	138.2 119.9	4.8		0.199 0.186	0.01	0.77	0.22 0.9 0.23 0.9				6.648 6.42	2016ApJ 818 155B 2009ApJ 695L 92K	2016ApJ82446B 2009A&A507.1613V	2016ApJ82446B			WD2236+2232
J0815+2309 PG0934+338	08 15	4.24 +2	23 09 05.1 Y 33 34 04.7 Y		1.07357	1545.9408 1604.448	0.00018	N	N		18	2117.3	131.7	2.6		0.199	0.021	0.8	0.22 0.9	99 0.22	21 21470	)	5.783	2013ApJ 769 66B	2016Ар.J82446В	1 1 1			
PG0934+338 GD 360			33 34 04.7 Y 33 13 04.2 Y		1.1142	1604.448 1623.456	0.0055	N Y	N N		16.4	321.9 88.9	111	17		0.38	>0.5 >0.178		#VALUE		0 24380			2011ApJ73067B 1995MNRAS.275828	м				WD1713+332
NLTT 12758			11 17 47.28 Y		1.15401	1661.7744	0.00005	v	2		15.4	32.6	81.9	17.3 89.7	3.8	0.83			0.05 1			21	220 8.37	8.16 2017MNRAS.466.112	see also 2022MNRAS				strong magnetic field for 1 WD. Only compact DWD to have a magnetic field
WD1428+373	14 30	2.61 +3	37 10 15.3 Y		1.15674	1665.7056	0.00002	N	N		15.5	98.1	67.9	1.68	5.5	0.348	>0.233		#VALUE	9	0 14010	)	7.36	2005MNRAS.359648	M				.,.,.,
WD1022+050 NLTT 16249		9.83 +0- 6.625 +20	04 46 10.5 Y	1	1.157155	1666.3032 1671.84	0.000005	N Y	N 2		14.2 15.8	43.1	74.77 104.6	1.16 3.7 97.4	5.4	0.389	>0.283	0.51	#VALUE		0 14693		7.36 1368 7.78	2005MNRAS.359.648 7.88 2012ApJ745L.12V	W 2020A&A638A.131N 2012ApJ756L5V	2025MNRAS 536 44900			In SPY  DA+DQ, Masses here are rough, but q-1
J0135+2359	01.35	0.856 +2	23 59 46 091 N		1.177655	1695.8232	0.009923	N	?		18.7	847.5	178.9	6.4		0.21	0.04 >1.02		0.09 #VALUE	0.00	8 14130	)	6.46	2023ApJ 950.141K				ELM	and the same of th
J1021+0543 PG0834+501	10 21 ns 27	3.12 +0: 7.34 +4	05 43 22.28 Y 49 52 27.9 Y		1.24995	1799.928 1848.96	0.0041	N N	? N		19.4 15.3	1420.0 515.0	95.6 58	11.6		0.23	0.013 >0.33 >0.22		#VALUE	0.01	18314		6.703	2020ApJ 889 49B 2011ApJ 730 67B					
J0124+3908	01 24	9.73 +3	39 08 04.43 Y		1.29211	1860.6384	0.00433	0.22477 N	?		18.3	833.0	127	9.9		0.407	0.034 >0.69		#VALUE	0.03			7.286	2020ApJ 889 49B					
J0147+0113 J0441-0547			01 13 58.28 Y 05 47 34.95 N		1.30338	1876.8672 1900.7568		0.57599 N 1.55179 N	?		20.2 18.3	809.0 4733.0		15.7 18.1		0.24	0.012 >0.74		#VALUE	0.01	12 9383 11 12730	1	6.947 5.045	2020ApJ 889 49B 2020ApJ 889 49B					M2min high, but multiple aliases
PG1036+086	10 39	7.38 +0	08 18 41.0 N		1.3283	1912.752	0.0109	?	?		16.4	230.9	111	17		0.42	>0.37		#VALUE	9	0 22230		3.043	2011ApJ73067B				SPY	Also in SPY, but not claimed as a binary in their papers
WD0136+768 J1512+2615		1.60 +7 5.70 +2	77 09 00.7 Y 26 15 38 5 Y		1.407221	2026.39824 2139.3648	0.000009 0.02348 Y	Y 2	N 2		14.9 19.6	74.7 933.7	67.4 107.6	0.8 84.8	1.8	0.47		0.37 0.76	0.24 1.		0 18500 24 12130	105	6.62	2002MNRAS.332745 2010ApJ723.1072B	W 2016ApJ82446B				
WD1202+608	12 04	8.54 +6	60 32 08.1 Y		1.49303	2149.9632	0.00011	N	N		13.5	202.1	107.6 77.4	7.4		0.486	>0.014		#VALUE	9	0		0.02	1995ApJ452L.133H	2010000.004400				Feige 55
SDSS J022932.28+713 7	02 29	2 +7	71 30 02.48 N	1.49	4595833 1.55578	2152.218	0.000025	N	N		16.28 12.7	1625.0	169	3		0.18	0.02 1	1.19	0.21 1.	37 0.21	11 8567		4.11 1920 7.8	2024ApJ 968 42A					photometric variability. unseen companion. ELM WD + WD or ELM WD + NS
L870-2 J1130+0933	01 37	9.34 -04	04 59 44.3 Y 09 33 03.6 Y		1.55578	2240.3232 2245.464	0.00045	Y	N		12.7	12.6		2.3 69.6	2.3	0.18 0.47 0.179	0.02 1 0.05 0 0.01 >0.19	0.52	0.21 1. 0.05 0. #VALUE	37 0.21 99 0.07	11 8567 71 7470	99	920 7.8 5.062	7.89 1988ApJ 334 947S 2016ApJ 818 155B	1989ApJ345L91B				In SPY WD 0135-052. Closest SB2 WD known. First discovered SB2 white dwarf system. Very high pm (800mas/yr)
WD1204+450	12 06	7.78 +4	44 49 53.9 Y		1.602663	2307.83472	0.00014	Y	N N		15.1	121.9	99.6	2.2		0.46		0.52	0.	98	0 31000	160	1000	2002MNRAS.332.745	м				Gaia ID 1539240932275710720
WD 1447-190	14 50 1	.93 -19	9 14 08.67 N		1.79083	2578.7952		N	N		15.7	48.6	83.8	1.3		0.41	0.1 0	0.33	0.09 0.	74 0.13	85 8000	50	000 7.65	7.5 2020MNRAS.493.280	к				
WD0341+021 WD0326-273	03 28	0.75 +00 8.74 -27	02 15 29.8 Y 27 19 00.6 Y		1.820697	2621.80368 2700.576	0.0005	N N	N N		15.4 13.6	143.5 23.0	73 96.2	0.5		0.38		0.59		1.1	0 9158		7.44	2000MNRAS.319305 2005A&A440.1087N	w				In SPY, P from SPY follow-up In SPY, Looks like a triple from gaia (common pm)
HE0315-0118 PG 1632+177	03 18	3.25 -01	11 07 11.7 Y		1.9128	2754.432 2951.8128	0.00025	Y	N o		14.7	70.2 25.6		2 58.4	1.9	0.4	0.05	0.49	0.05 0.	89 0.07 89 0.02	71 12720 28 11500		7.74 1100 7.78	2017MNRAS.466.157 7.55 2021MNRAS.502.497	R 2020A&A638A 131N K 2024MNRAS 532 2534			DBL	In SPY. SDSSJ031813.25-010711.7. WD0315-013 WDJ163441.85+173634.09
J1128+1743	11 28	3.33 +1	17 43 54.6 Y		2.165	3117.6	0.039	N	N.		19.6	1627.6	78.2 41.2	2 58.4	1.9	0.4 0.49 0.183	0.01 >0.11		#VALUE	0.0	11260	)	4.756	2016ApJ 818.155B				and.	
WD1349+144 HE1511-0448		3.92 +1-	14 09 45.4 Y		2.2094 3.222	3181.536 4639.68	0.0001	Y	N		15.2 15.3	115.7 292.9	74.5			0.53 0.48	>0.46	0.33	#VALUE	86	0 16600		7.65 7.45	2003whdw.conf43K 2005A&A440.1087N	2005A&A440.1087N				In SPY In SPY, this is a SPY paper, Nelemans et al 2005
NE (011-0448	15 14	2.97 -04	34 Did 33.4 Y		3.222	4639.68	0.001	N	N		15.3	292.9				0.48	>0.46		∓VALUE	2	u 50896		7.45	2005A&A440.1087N					III OF 1, IIIIS IS IN OF 1 PAPER, INDIAMENTAL SELECTION

			SecureDWD						Double		Verific Binary/ LISA	Di (p	stance c, 1/p.									Atotal						Discovery DBL (SPY/ELM to include,	
		Dec	binary?	Period (day	Period	(min) P	Period error	Aliases	lined?	Eclipsing	Detectable C	Smag lit	erature) K	1 (km/s) K1	error K2	(km/s) K2 e	ror M1	M1 error	M2	M2 error N	ttotal e	rror T	M :	T2	Logg1 L	.ogg2 Ref1	Ref 2	Ref 3 Ref 4 incomplete)	Comment
	12 44 28.57		Υ	3.3		4820.2704	0.00014	1	N	N		14	83.3	68.4	0.9		0.		>0.373	0.022	#VALUE!	0.022				1995MNRAS.275828M			Spectra in SPY also. Not listed as DD from SPY alone. WD1241-010
11317+453	13 19 13.71	+45 05 09.9	Y	4.8	7214	7015.8816	0.00022	2	N	N		14.1	49.1				0.	33	>0.421		#VALUE!	0				1995MNRAS.275828M			WD1317+453
2032+188	20 35 13.81	+18 59 21.6	Y	5	0846	7321.824	0.0003	3	N	N		15.4	109.2	63.5	1.59		0.4	06	>0.469		#VALUE!	0	18540		7.48	1995MNRAS.275.828M	2005MNRAS.359.648M	ı	Spectra in SPY
		+04 03 46.7	v		3.266	9023.04	0.00005		N	N		13.9	44.6	61.87	0.55		0.4		>0.515		#VALUE!		14787		7.46	2005MNRAS.359648M	2020A&A638A.131N		In SPY
1115+166		+16 21 29.3	v			43326.72	0.0000					15.1	90.5	01.07	0.55		0.4				0.95	0.192	22090	16210	8.12	8.19 2002MNRAS.334833M			In SPY. DA+DB long period
			Y						Y	N													18440				2002ApJ566.1091B		In SPY, DAPLIES long period
F J0238+0933	02 38 35.0	09 33 03.5	Y	0.1368			0.000000004		Y	Y		18.64	921.0	166	16	183	34 0.	35 0.06	0.299	0.045	0.649	0.075		11800	7.33	7.06 2025arXiv250515580V			
F J0720+6439	07 20 03.0	64 39 47.4	Y	0.031411	6865 45	23282856 0	.0000000003	3	Y	Y		19.01	921.0	272	15	328	60 0.	31 0.05	0.274	0.025	0.584	0.056	18200	7620	7.13	7.26 2025arXiv250515580V			
F J1110+7445	11 10 16.7	74 45 59.9	Y	0.12057	6714 17	3.6304682 (	0.000000001		?	Y		18.62	514.0				0.	33 0.085	0.39	0.064	0.72	0.106	13820	10240	7.41	7.49 2025arXiv250515580V			
F J1356+5706	13 56 26.7	57 05 46.0	Y	0.063839	7116 9	1.9291847 0	.0000000000	3	Y	Y		18.94	361.0	166	8	296	10 0.	45 0.03	0.267	0.016	0.717	0.034	10130	8440	7.7	7.32 2022MNRAS.509.4171K	2025arXiv250515580V		
F J1758+7642	17 58 12.9	76 42 16.9	Y	0.131333	3951 18	9.1200889 (	0.000000001		?	Y		18.96	624.0				0.	29 0.075	0.21	0.08	0.5	0.11	15190	12530	7.3	7.08 2022MNRAS.509.4171K	2025arX)v250515580V		
TF J2249+0117	22 49 01.6	01 17 22 7	Y	0.095657			0.0000000002		2	Y		18.55	647.0				0.	24 0.085	0.37	0.065	0.61	0.107	19010	8880	7.12	7.49 2025arXiv250515580V			
		-07 50 03.3		0.00000								16.4	36.0								0.2					2017MNRAS 467 1414M			Spectra in SPY
		+06 46 26.8								-		15.4	105.8				0.				0.35				7.27	2020A&A638A.131N			Openia ii o i
									N	7												- 0	16891		1.21				IN SPY
D0032-317	00 34 49.82	-31 29 54.3	N						N	?		16.1	431.1				0.	35			0.35	0				2017MNRAS.467.1414M			Spectra in SPY. Phot variable in Gala
/D2336_187										_		15.5									0.36		7810		7.46	2020A&A638A.131N			In SPY. Attempted in WD-BASS but difficult to get good line cores -> third body/thinner H abundance. Similar flux
		-18 26 12.7							Y	?			37.2				0.					0							contributing stars.
		+07 28 01.9							Y	?		16.6	139.2				0.				0.39	0	10453		7.5	2020A&A638A.131N			In SPY
/DJ135342.35+165651.75	13 53 42.35	+16 56 51.75	Y						Y	?		16.6	102.2				0.		0.43	0.05	0.9	0.064	9600	7600	7.76	7.6 2024MNRAS.532.2534M		DBL	
/DJ002602.29-103751.86	00 26 02.29	-10 37 51.86	Y						Y	?		16.2	88.5				0.	17 0.02	0.42	0.02	0.89	0.028	10700	5800	7.74	7.6 2024MNRAS.532.2534M		DBL	
																													In SPY A fit to the SPY data in WD-BASS (unpublished) gives T1=12300 T2=8750 logg1 = 7.70 logg2=7.69 M1=0.46 M2=0.46
		-29 31 38.8							Y	?		15.9	100.7				0.4				0.413	0	11769		7.54	2020A&A638A.131N			M1=0.46 M2=0.46
DJ183442.33-170028.00									Y	?		16.9	96.7				0.				0.88	0.036	8200		7.59	7.76 2024MNRAS.532.2534M		DBL	
/DJ141632.84+111003.85	14 16 32.84	+11 10 03.85	Y						Υ	?		16.9	129.3				0.		0.42	0.02	0.89	0.036	10500	7500	7.76	7.6 2024MNRAS.532.2534M		DBL	
DJ212935.23+001332.26									Y	2		15.5	65.4				0.		0.44	0.02	0.88	0.045	9200		7.69	7.64 2024MNRAS.532.2534M		DBL	
		47 53 42.8							N	2		15.9	246.8				0.		0.44	0.02	0.43	0.045	29352	, 200	7.09	2020A&A638A.131N		Lat	In SPY
																			-										m or 1
DJ152038.37+390349.32									Y	7		16.9	94.4				0.		0.32	0.02	0.93	0.036	9600	5400	8.02	7.35 2024MNRAS.532.2534M		DBL	
		-55 08 37.5							N	?		15.8	67.9				0.				0.45	0				2017MNRAS.467.1414M			Spectra in SPY
		+05 19 27.9							N	?		16	230.9				0.				0.45	0				2017MNRAS.467.1414M			Spectra in SPY
/D2330-212	23 32 59.52	-20 57 12.4	Υ						N	?		16.7	263.2				0.	45			0.45	0	26442		7.44	2020A&A638A.131N			In SPY
/DJ114446.16+364151.13	11 44 46.16	+36 41 51.13	Y						Y	?		15.1	89.7				0.	12 0.02	0.45	0.04	0.87	0.045	13300	13000	7.63	7.69 2024MNRAS.532.2534M		DBL	
/DJ005413.14+415613.73	00 54 13 14	+41 56 13 73	Y						Y	2		15.7	54.1				0.	13 0.04	0.45		0.88	0.057	7700	7400	7.69	7.73 2024MNRAS.532.2534M		DBL	
/DJ084457.81+453632.94									v	2		15.9	60.7				0.		0.43		1.01	0.046	9800	5900	7.97	7.71 2024MNRAS 532 2534M		DBL	
													233.5				0.		0.43	0.03	0.47	0.046	9800 54386	5900	7.97			udL	In SPY
E0455-282	04 56 58.35	-53 10 26.6	Y						N	7		16.8										- 0				2020A&A638A.131N			IN SPY
DJ000319.54+022623.28									Y	?		16.4	158.3				0.			0.025	0.85	0.032	18200		7.69	7.48 2024MNRAS.532.2534M		DBL	
DJ013446.42+282616.83									Y	?		16.9	177.2				0.		0.43		0.92	0.063	13700	9700	7.77	7.6 2024MNRAS.532.2534M		DBL	
J020119.40-050748.59	02 01 19.40	-05 07 48.59	Y						Y	?		16.8	85.1				0.		0.54	0.03	1.03	0.042	8300		7.8	7.91 2024MNRAS.532.2534M		DBL	
J151109.90+404801.18	15 11 09.90	+40 48 01.18	Y						Y	?		15.7	55.0				0.	97 0.03	0.44	0.025	1.11	0.039	9100	7600	8.12	7.71 2024MNRAS.532.2534M		DBL	
U170120.99-191527.57	17 01 20.99	-19 15 27.57	Y						Y	?		15.2	97.0				0.	97 0.03	0.48	0.02	1.15	0.036	20500	13500	8.08	7.75 2024MNRAS.532.2534M		DBL	
		40 23 26.1							N	2		16.3	104.9				0.				0.49	0	16737		7.7	2020A&A638A.131N			In SPY
		-02 08 40.6	v									19.7	179.7				0.				0.49		107 37			2017MNRAS.468.2910B			In SPY
0J211327.98+720814.03			1						14	,		16										0.028		7000		7.5 2024MNRAS.532.2534M			mort .
									Y	7			96.2				0.		0.38	0.02	0.8	0.028	11100	7000	7.63			DBL	
		+02 04 21.4							N	?		14.7	47.8								0.5	0	15228		7.75	2020A&A638A.131N			In SPY
		-60 16 07.6							N	?		15.1	97.3								0.5	0				2017MNRAS.467.1414M			Spectra in SPY
E0417-3033	04 19 22.07	-30 26 44.0	N						N	?		16.6	144.0					.5			0.5	0				2017MNRAS.467.1414M			Spectra in SPY
S1204+0159	12 07 29 51	+01 42 50.6	N						N	2		17	219.3					5			0.5	0				2017MNRAS.467.1414M			Spectra in SPY
																													In SPY, WD0037-006. Aft to the SPY data in WD-BASS (unpublished) gives T1=13400 T2=6600 logg1 = 7.87
GGR 561	00 40 22.88	-00 21 30.1	Y						Y	?		14.8	54.8				0.5	05			0.505	0	13922		7.78	2020A&A638A.131N			logg2=7.60 M1=0.54 M2=0.41
/DJ221209.01+612906.96	22 12 09 01	+61 29 06 96	Y						Y	2		16.3	64.5				0.	54 0.03	0.55	0.035	1.09	0.046	8100	7000	7.9	7.93 2024MNRAS.532.2534M		DBL	
D.1182606.04+482911.30									v	2		163	136.0				0.		0.54		1.01	0.071	14400		7.72	7.89 2024MNRAS 532 2534M		DBI	
DJ141625.94+311600.55									i.	-		15.7	115.7				0.			0.02	0.89	0.036	13300		7.74	7.62 2024MNRAS.532.2534M		DBL	
										,																			
U014202.72+262354.58									Y	?		17.3	173.2				0.		0.45	0.03	0.98	0.042	12200	8300	7.86	7.72 2024MNRAS.532.2534M		DBL	
		+14 36 03.2							N	?		14.5	83.4				0.				0.54	0	26637		7.79	2020A&A638A.131N			In SPY
J231404.30+552814.11									Y	?		16.1	105.3				0.		0.38	0.02	1.04	0.036	14000	8600	8.08	7.5 2024MNRAS.532.2534M		DBL	
2254+126	22 56 46.26	12 52 49.9	N						N	?		15.8	62.6				0.	55			0.55	0				2017MNRAS.467.1414M			Spectra in SPY
1221-2642	02 23 29.4	-26 29 19.7	N						N	?		15.8	179.0				0.	55			0.55	0				2017MNRAS.467.1414M			Spectra in SPY
		-11 58 08.5							N	2		16	68.1				0.				0.55					2017MNRAS 467 1414M			Spectra in SPY. Phot variable in Gaia
									N.	2		16.2	83.6				0.				0.55					2017MNRAS.467.1414M			
		-18 01 29.1							Pi	-												0							Spectra in SPY. Maybe triple? Common proper motion pair in dr3
		-32 11 50.7							N	?		16.3	192.6				0.				0.55	0				2017MNRAS.467.1414M			Spectra in SPY
U013812.93+444252.10									Y	?		15.5	81.6				0.		0.53		1.1	0.036	15000	8000	7.92	7.88 2024MNRAS.532.2534M		DBL	
U180115.37+721848.76									Y	?		16	128.4				0.		0.62	0.03	1.17	0.036	18000	11200	7.88	8.02 2024MNRAS.532.2534M		DBL	
		-50 11 31.8							N	?		15.1	62.7								0.6	0				2017MNRAS.467.1414M			Spectra in SPY
		-05 21 45.9							N	?		15.7	112.0					.6			0.6	0				2017MNRAS.467.1414M			Spectra in SPY
1080856.79+461300.08									v	2		16.2	118.2						0.47	0.02	1.07	0.036	14000	10100	7.99	7.76 2024MNRAS.532.2534M		DBI	
												16.4	84.3				0.			0.02	1.07	0.036	10900		8.13	7.76 2024MNRAS.532.2534M 7.75 2024MNRAS.532.2534M		DBL	
J130014.82+181734.41	13 00 14.82	+18 17 34.41	1						,			16.4	84.3				0.	0.03	0.46	0.03	1.14	0.042	10900	6/00	8.13	1.15 2024MNHAS.532.2534M		DBL	
216+1551	22 19 57 10	+16 06 57.4	v						v	2		16	130.5				0.	14			0.64		19163		8.04	2020A&A638A.131N			In SPY A fit to the SPY data in WD-BASS (unpublished) gives T1=19400 T2=13300 logg1 = 8.06 logg2=7.87 M1=0.66 M2=0.54
										-									-										M1=U.00 M2=U.04
J020847.22+251409.97									Y	7		13.2	39.1				0.				1.29	0.036	21200		7.86	8.21 2024MNRAS.532.2534M		DBL	
J192420.74+070135.14									Y	?		16.6	161.7				0.		0.63	0.045	1.22	0.06	16700	14100	7.96	8.03 2024MNRAS.532.2534M		DBL	
		+10 47 01.5							Y	?		16.5	112.9				0.				0.67	0	17481		8.1	2020A&A638A.131N			In SPY
046+0044	20 48 38.26	+00 56 00.8	N						N	?		16	216.2								0.7	0				2017MNRAS.467.1414M			Spectra in SPY
148-3857	21 51 19.23	-38 43 04.5	N						N	?		16.4	175.5					.7			0.7	0				2017MNRAS.467.1414M			Spectra in SPY
180150.89+103401.08									Y	2		15.7	115.9				0.		0.53	0.03	1.12	0.036	22000	8300	7.92	7.89 2024MNRAS.532.2534M		DBL	
165935.59+620934.03												16.3	111.8						0.53	0.03	1.12		13000		7.8	8.17 2024MNRAS.532.2534M		DBL	
									*	-												0.045							
81058.67+311940.94									Y	?		14	49.0				0.8		0.721		1.555	0.044	17260		8.35	8.164 2024MNRAS.532.2534M	2025NatAs.tmp85M	DBL	
214323.95-175413.00									Y	?		16.1	119.2				0.			0.03	1.28	0.042	14200		8.05	8.04 2024MNRAS.532.2534M		DBL	
J192002.51-184442.99	19 20 02.51	-18 44 42.99	Y						Y	?		16.7	155.7				0.	73 0.045	0.65	0.045	1.38	0.064	20400	12000	8.17	8.08 2024MNRAS.532.2534M		DBL	
		-16 41 53.5							N	?		15.1	66.8				0.				0.75	0				2017MNRAS.467.1414M			Spectra in SPY
																						-							In SPY. A fit to the SPY data in WD-BASS (unpublished) gives T1=21500 T2=17700 logg1 = 8.07 logg2=8.22
324-1942	03 27 05.02	-19 32 23.8	Y						Y	?		16	140.6				0.	78			0.78	0	23811		8.27	2009A&A505.441K		SPY	In SPY A fit to the SPY data in WU-BASS (unpublished) gives 11=21500 12=17/00 logg1 = 8.07 logg2=8.22 M1=0.67 M2=0.75
		-38 30 39.0							Y	2		15.2	53.8				0.8				0.854		13404		8.41	1994ApJ_429_369W	2020A&A638A.131N		In SPY, DAB but no obvious RV change
										-																	_uzunanp.an.131N		
		-19 54 46.6	N						Y	Y		15.5	24.4				0.	95			0.86	0	8893		8.43	2020A&A638A.131N			In SPY
		+05 16 06.3							?	?		15.9	45.5								0	0				2017MNRAS.467.1414M,			Spectra in SPY
213+059	02 15 36.72	+04 13 38.1	Y						?	?		16.8	180.4								0	0							
		+05 04 29.2							N	2		13.9	22.0										8399		7.77	1999MNRAS 307 +22M	2000MNRAS.319.305M	2020ASA 63SA 131N	In SPY, multiple competing aliases
		+41 29 55.62							v	2		14.6	32.1										7435		8.04	2003ApJ 596.477Z			Quoted in paper as double Hosta cores
												15.3	38.3					6 0.12	0.68	0.13	1.28	0.177	7435 8500	6100		8.15 2020MNRAS.493.2805K			Spectra in SPY also, Very high RUWE
							0.03		14	PE						687.4	3.8 1.						8500	6100	8				opecare in or 1 ess. very righ NUWE
1418-088	14 20 54.813	-51 39 49.15		0.0192291		27.69						16.9	553.0					0.04	0.24	0.03	1.26	0.05		9350		5.95 https://arxiv.org/pdf/2411.1			A candidate LISA detectable type la supernova progenitor