



Orbital elements of double stars: ADS 1345, 7730 and 8630

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INTERNATIONAL ASTRONOMICAL UNION COMMISSION 26

(DOUBLE STARS)

INFORMATION CIRCULAR No. 159 (JUNE 2006)

NEW ORBITS

| ADS α 2000 δ | Name n | P a | T i | e ω | Ω (2000) Last ob. | 2006 2007 | Author(s) |
|-------------------------------|----------------------|--------------------------------------------|------------------|----------------|-----------------------------|------------------------------------------|-----------------------|
| 243 00182+7257 | A 803 1.4538 | 247 ^y 63 0 ^{''} 367 | 2053.72 68°6 | 0.392 243°0 | 151°2 1998.6650 | 306°4 0 ^{''} 254 307.4 0.256 | NOVAKOVIC |
| - 00568+6022 | BAG 10 Aa 74.2421 | 4.85 0.032 | 2003.50 47.6 | 0.224 104.4 | 329.9 1998.7770 | 265.4 0.028 316.5 0.034 | DOCOBO & ANDRADE |
| 805 00583+2124 | BU 302 1.0845 | 331.97 0.651 | 2017.54 48.1 | 0.665 252.2 | 17.2 1999.892 | 200.1 0.290 203.0 0.279 | CVETKOVIC |
| 832 01011+6022 | A 926 1.4174 | 253.99 0.318 | 2131.63 32.3 | 0.388 85.7 | 74.2 1998.666 | 340.2 0.373 341.0 0.373 | CVETKOVIC |
| 828 01014+1155 | BU 867 1.5010 | 239.84 0.745 | 2000.55 102.6 | 0.222 160.8 | 173.4 2001.769 | 354.7 0.579 354.2 0.582 | CVETKOVIC |
| 974 01112+4113 | A 655 2.3515 | 153.09 0.338 | 2040.77 53.1 | 0.185 290.5 | 157.5 1995.771 | 342.0 0.339 343.4 0.335 | CVETKOVIC |
| - 01361-2954 | HJ 3447 0.2394 | 1503.58 3.155 | 2039.79 55.6 | 0.604 140.2 | 69.6 2001.8840 | 179.3 0.801 181.0 0.803 | NOVAKOVIC |
| 1345 01424-0645 | A 1 0.5320 | 676.7 0.989 | 1885.32 44.1 | 0.719 303.0 | 163.1 2006.091 | 250.4 0.836 250.7 0.839 | SCARDIA et al. (*) |
| 1503 01532+1526 | BU 260 0.3867 | 931.05 1.303 | 2804.38 71.8 | 0.262 119.9 | 73.0 1998.9640 | 259.3 1.099 259.5 1.098 | NOVAKOVIC |
| 1938 02333+5219 | STT 42 AB 1.2092 | 297.72 0.295 | 1985.66 80.3 | 0.353 222.4 | 96.1 1996.6913 | 26.7 0.038 37.2 0.042 | NOVAKOVIC |
| 2204 02563+7253 | STF 312 AB 0.1767 | 2037.66 3.880 | 2137.36 59.8 | 0.506 115.6 | 14.5 2003.9400 | 42.6 1.901 42.9 1.888 | NOVAKOVIC |

NEW ORBITS (continuation)

| ADS α2000δ | Name n | P a | T i | e ω | Ω(2000) Last ob. | 2006 2007 | Author(s) |
|-----------------------------------------------------------|-----------------------|------------------|------------------|----------------------------------|-----------------------------------------------|----------------------------|-----------------------|
| - 04070-1000 | HDS 521 16.2455 | 22.16 0.224 | 1996.74 123.6 | 0.691 255.4 | 37.6 2001.0764 | 343.9 0.236 337.9 0.230 | RICA |
| 3589 05003+3924 | STT 92 AB 0.2253 | 1598.04 5.379 | 3242.73 56.1 | 0.536 333.4 | 155.4 2002.9770 | 280.6 4.048 280.8 4.060 | NOVAKOVIC |
| 4078 05289-0318 | DA 6 0.6000 | 600. 0.553 | 1996.40 44.9 | 0.740 186.0 | 59.7 1997.1310 | 287.1 0.138 291.7 0.138 | LING |
| 6526 08017-0836 | A 1580 1.4102 | 255.28 0.318 | 2013.03 56.5 | 0.232 202.9 | 104.6 1996.181 | 288.2 0.245 289.5 0.243 | CVETKOVIC |
| 7730 10205+0626 | STF 1426 AB 0.5440 | 661.8 0.800 | 1674.23 47.2 | 0.189 22.8 | 114.0 2006.308 | 310.2 0.911 310.5 0.910 | SCARDIA et al. (*) |
| 8555 12274-2843 | B 228 8.1026 | 44.43 0.178 | 1952.41 65.4 | 0.659 166.9 | 137.3 2001.0801 | 112.2 0.160 115.0 0.177 | RICA |
| 8630 12417-0127 | STF 1670 AB 2.1289 | 169.10 3.644 | 2005.51 149.1 | 0.883 256.7 | 37.1 2006.427 | 103.5 0.406 59.5 0.658 | DOCOBO & TAMAZIAN |
| 8630 12417-0127 | STF 1670 AB 2.1289 | 169.10 3.643 | 2005.51 149.4 | 0.882 255.0 | 35.3 2006.450 | 104.3 0.409 60.0 0.657 | SCARDIA et al. (*) |
| 10374 17104-1544 | BU 1118 AB 4.1105 | 87.58 1.396 | 2024.68 95.2 | 0.950 274.8 | 38.9 2006.420 | 237.8 0.571 237.1 0.575 | DOCOBO & LING |
| 10795 17471+1742 | STF 2215 0.3388 | 1062.47 0.838 | 2066.49 132.2 | 0.397 270.6 | 105.5 2002.509 | 254.1 0.484 253.5 0.480 | CVETKOVIC |
| 11010 18025+4414 | BU1127AaB 1.32931 | 270.82 0.732 | 2102.72 150.9 | 0.365 239.1 | 142.5 2000.540 | 57.3 0.822 56.4 0.819 | CVETKOVIC |
| 13665 20182+2912 | A 1205 0.7759 | 464. 1.54 | 1969.67 100.1 | 0.877 251.4 | 105.8 2001.53 | 98.5 1.02 98.4 1.03 | RICA |
| 15300 21459+1153 | A 1223 AB 8.1651 | 44.09 0.123 | 1972.72 159.0 | 0.322 155.4 | 15.2 1998.679 | 344.9 0.131 338.2 0.125 | RICA |
| 15902 22241-0450 | BU 172 AB 2.4177 | 148.9 0.406 | 1987.64 162.2 | 0.706 274.1 | 91.8 2004.721 | 48.1 0.370 46.2 0.382 | DOCOBO & LING |

NEW ORBITS (continuation)

| ADS α 2000 δ | Name n | P a | T i | e ω | Ω (2000) Last ob. | 2006 2007 | Author(s) |
|-------------------------------|------------------|----------------|------------------|----------------|-----------------------------|----------------------------|------------------|
| 16886 23382+5514 | A 1493 3.1579 | 114.0 0.156 | 2011.40 142.2 | 0.230 258.7 | 165.2 1996.5405 | 300.8 0.108 295.6 0.105 | DOCOBO & LING |

(*) SCARDIA, PRIEUR, PANSECCHI, ARGYLE & BASSO

COMMENTS ABOUT IAU SYMPOSIUM 240

At the occasion of the organization at Prague of this symposium, I feel necessary to recall that specialists of close double stars and wide ones met at many other important meetings (colloquia and symposia) well before. Each of them appeared more important than the previous ones in a logical increasing order and it is thus not surprising that the present one will be at the top. But only some of them could be considered as “corner stones”. I wish that the next Symposium will be one of these as was the first one of the series, as mentioned by Mirek PLAVEC in his talk at the 69th IAU Colloquium held at Bamberg in 1981 (Binary and Multiple Stars as Tracers of Stellar Evolution - Astrophysics and Space Science Library, 98, 1982, pp.119-122) by saying:

“By this format and title, this Colloquium resembles the Colloquium: On the Evolution of Double Stars, held at Brussels 15 years ago, in September 1966 (Dommagnet, 1967). That was a memorable colloquium, since the evolution in binary stars was, for the first time, the topic of a whole meeting. Since then, our field has expended tremendously. We held two large-scale Symposia discussing the evolution of close binaries only (Eggleton, Mitton and Whelan, 1976; Plavec, Popper and Ulrich, 1980) in addition to several other meetings in a slightly lower scale. After the most recent Symposium, held in Toronto in 1979, I concluded that in the future it would no longer be possible to cover adequately, in one full Symposium, the whole fields of close binaries.”

J. Dommagnet.

WULFF DIETER HEINTZ (1930 - 2006)

Once again I have the sad duty of noting the passing of a long-time member of Commission 26. Dr. Wulff Dieter Heintz died over the weekend of June 10/11, 2006, following a long battle with the illness.

Wulff Heintz was one of the giant figures in double star astronomy for many decades. As an observer of visual doubles he was second only to van den Bos in output, publishing nearly 20,000 means (based on some 54,000 measures, 47,500 by micrometry and 6,500 by photography) and discovering 918 new pairs over a career spanning half a century. He remains the largest contributor of “preferred” orbits to the Sixth Catalog of Visual Binary Stars; the (incomplete) database for that catalog includes an astounding 748 sets of his orbital elements. The Sixth Catalog itself is a direct descendant of the Fourth Orbit Catalog, published by Wulff and Charles Worley in 1983 and a standard reference for 17 years. Finally, Wulff’s book “Double Stars” (originally published in German under the title “Dopplesterne”) remains the bible for many of us in the field, 35 years after its publication.

Born in Wursburg, Germany, Wulff began his work in astrometry at the University of Munich, and began specializing in the field of double stars very early in his career; his first doublestar-related publication (fittingly, orbits of four visual binaries) was published in 1954. He joined the faculty of Swarthmore College (Swarthmore, Pennsylvania) in 1967, where he remained a popular lecturer and indefatigable observer until his retirement in 1998. Known for the utmost care in his observing and the sparest of prose in his writing, he remained active in astronomy even as an emeritus professor; the final publication bearing his name was a poster presented this past January at the American Astronomical Society meeting in Washington. His was truly a remarkable career.

I’m sure the thoughts of many of us will be with Wulff’s family.

William Hartkopf
U.S. Naval Observatory.

The deadline for contributions to Information Circular No. 160 is:

October 15th 2006

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