## **COMMISSION 26**

## DOUBLE AND MULTIPLE STARS

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Brian D. Mason, Edouard Oblak,
Terry D. Oswalt, Dimitri Pourbaix,
Colin D. Scarfe

# PROCEEDINGS BUSINESS SESSION, 7 August 2009

#### 1. Introduction

The business meeting of Commission 26 was held on Friday, 7 August 2009, and consisted mainly of scientific talks. At the end, incoming President J. A. Docobo gave a video presentation with his thoughts regarding future activities of Commission 26, including the comments of members of the OC. He also announced a December 2009 workshop and discussed potential meetings in the coming years.

## 2. The science talks

Brian Mason spoke about the present status and future plans for the USNO Double Star Catalog. During the ensuing discussion, the prospects of a joint commission 26/54 meeting on interferometric binaries were evaluated. Doubts were expressed as to whether a third double star CD was necessary. The consensus was that it was not yet needed.

Oleg Malkov talked about the Binary Star Data Base, set up and maintained in collaboration with Edouard Oblak and Bernard Debray. Although it may appear repetitious to the other binary star catalogs, it includes data from all observational categories. The database is currently available at bdb.obs-besancon.fr . It will be transferred to Moscow with a mirror at Besancon.

Dimitri Pourbaix gave a progress report on the 9th catalogue of spectroscopic binaries, which now contains 2946 systems and 3608 orbits, 1903 of which have radial velocities. To date, data from 591 papers have been added, with an estimated 80% completeness. More information, and the catalog itself, is available at http://sb9.astro.ulb.ac.be (but see also Pourbaix et al. 2004, A&A 424, 727). With adequate manpower the updated catalog could be completed in three years, but under the present circumstances, six years would be required. A very interesting proposal is to include in the USNO orbit catalog ORB6 a direct link to the SB9 page for spectroscopic binaries, when pertinent.

Christos Siopis presented a talk on Gaia eclipsing binaries. The expectation is that among  $10^8$  variable objects there will be  $10^5 - 10^6$  eclipsing binaries. They will have 30-200 transits per object, with a mean of about 80.

Christine Allen (with A. Poveda) discussed a specific wide common proper motion companion to GJ 282AB. The probability of its being optical is  $7.6 \times 10^{-5}$ . All components have the same parallax, proper motion, radial velocity, and consistent spectral types. From their X ray luminosities similar ages are obtained. The larger than expected proper motion difference may be due to the dynamical disintegration of the wider C companion.

C. Allen (with M.A. Monroy) then presented a progress report on an improved list of wide halo binaries. They find the major semiaxes to follow Opik's distribution (a power law with exponent 1) rather than the power law with exponent 1.55 which is favored by Chaname and Gould. The widest systems follow Oepik's distribution up to separations of more than 60 000 AU.

In a video presentation José A. Docobo discussed work done at Santiago de Compostela. Their orbit catalog includes now 2061 orbits of 1618 orbits, and is available at http://www.usc.es/astro. This catalog can be considered to be complementary to ORB6.

# 3. Closing remarks

In the video sent by José A. Docobo he expressed his willingness to promote and host a C26 meeting, considering such meetings essential for better communication among C26 members, He discussed possible dates and subjects, which would need to be further evaluated among OC members.

My thanks are due to B. Mason, for making available his notes on the meeting.

 $\begin{array}{c} \text{Christine Allen} \\ President \ of \ the \ Commission \end{array}$ 

#### Participants

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