

## 26. COMMISSION DES ETOILES DOUBLES

### Report of Meeting, 19 August 1961

PRESIDENT: Peter van de Kamp.

SECRETARY: Sarah Lee Lippincott.

The Executive Committee's proposal to appoint R. van der Riet Woolley as Vice-President was approved. Following the instructions of the Executive Committee an Organizing Committee was suggested and approved as follows:

O. J. Eggen, P. Muller, K. A. Strand and W. H. van den Bos.

#### IAU SYMPOSIUM NO. 17

IAU Symposium No. 17 on Visual Double Stars, held on 11-12 August 1961 in Berkeley was briefly summarized by the President and Chairman of the symposium. Salient features included: (a) the feeling that double-star observers do not get their share of observing time with large telescopes; (b) the need for liaison with other phases of astronomy; (c) a critical review of techniques and programs; (d) the need to inspire and encourage young people to take up visual double-star astronomy.

The following recommendations were adopted at the symposium:

1. IAU Symposium No. 17 (Visual Double Stars), considering the fundamental importance of double-star observations to our science and recognizing the growing scarcity of qualified observers, stresses the necessity of encouraging young astronomers to take up double-star astronomy.

The symposium expresses the wish that the IAU facilitate by all means at its disposal the sending of young observers to those observatories where this research is actively pursued. (Unanimously adopted.)

Le Symposium No. 17 de l'UAI, considérant l'importance fondamentale des observations d'étoiles doubles pour toutes les branches de l'astronomie et la pénurie actuellement croissante d'observateurs qualifiés, insiste sur la nécessité d'encourager les jeunes astronomes à s'orienter vers l'étude des étoiles doubles.

Exprime le souhait que l'Union Astronomique Internationale facilite par tous les moyens en son pouvoir l'envoi des jeunes observateurs dans les Observatoires où cette étude est poursuivie activement. (Unanimité.)

2. The Symposium recommends that experienced double-star observers be given increased opportunity to use reflectors of large aperture. (Unanimously adopted.)

Le Symposium recommande que les observateurs d'étoiles doubles confirmés se voient offrir davantage d'occasions d'utiliser les grands réflecteurs. (Unanimité.)

3. The Symposium notes with satisfaction that it is the wish of the Republic Observatory, South Africa, to continue its traditional specialization in the field of visual double stars and expresses the hope that the acquisition of a large reflector for this purpose will not be long delayed. (Adopted with one abstention.)

Le Symposium enregistre avec satisfaction l'intention de l'Observatoire de la République d'Afrique du Sud de maintenir sa spécialisation traditionnelle dans le domaine des étoiles doubles visuelles, et exprime l'espoir que l'acquisition d'un grand réflecteur pour ces travaux puisse intervenir prochainement. (Adopté avec une abstention.)

4. The Symposium expresses its gratitude to Dr Jeffers and Dr van den Bos for their monumental work in creating the Card Catalogue on double-star observations and the index catalogue of double stars.

To insure the preservation of these catalogues, now available only at the Lick Observatory, the Symposium recommends that copies be deposited at a few selected observatories. (Adopted by Acclamation.)

Le Symposium exprime sa gratitude à MM. H. M. Jeffers et W. H. van den Bos pour l'oeuvre considérable qu'ils ont accomplie en créant le Card Catalogue d'observations et l'Index Catalogue d'étoiles doubles.

Pour assurer la conservation de ces catalogues, qui n'existent actuellement qu'à l'Observatoire Lick, le Symposium recommande que des copies soit déposées dans un petit nombre d'Observatoires choisis. (Par Acclamation.)

The proceedings of the symposium will appear in the *Publications of the Astronomical Society of the Pacific*; (added in proof: Vol. 74, No. 436, 5-34, February 1962.)

#### REPORTS AND DISCUSSIONS

*Jeffers* discussed the catalogues covering both the northern and southern hemispheres which he and van den Bos are completing.

*Barrato* reported that 500 micrometer measurements have been made on 150 stars with the 18-inch refractor at the National Observatory in Brazil.

*Hertzsprung* called attention to several double stars with variable components. 44<sup>i</sup> Boo contains a W UMa star which could yield a parallax from the light-time across the orbit. The same situation holds for the eclipsing binary component system YY Gem. Attention was also called to QS Aql and BD + 10°2234.

*Van Biesbroeck* expressed concern over the dearth of young people entering positional double-star astronomy; we have a moral obligation to continue this work.

The desirability of increased liaison between double-star observers and spectroscopists and astrophysicists was brought up. *Petrie* reminded those present that there was much wealth of material awaiting spectroscopic and astrometric observation. A sporadic approach is not as valuable as a well-planned program. *Strand* expressed the hope that *Petrie's* intensive spectroscopic program would continue. *Miss Roemer* recalled the Lick Observatory Mills Spectrograph program on double stars which was started some years ago. *Finsen* urged that stars of special interest be examined regularly. *Stephenson* suggested that the Warner and Swasey Observatory program in the UV might include a search for duplicity. The organizing committee was requested to consider means for closer liaison with astrophysicists.

*Kulikovsky* drew attention to the catalogue, in preparation in the U.S.S.R., of double stars in which one of the components is a non-stable star.

*Strand* expressed concern over the limited double-star work now being carried out with the 36-inch Lick refractor, used with great success in the past for visual, spectroscopic and photographic double-star observations. Visitors' programs only are not sufficiently effective—there must be some long-term continuity. Both *Muller* and *van de Kamp* acclaimed the visitors' program, but urged more permanent programs and long-range planning.

*Couteau* stated that during the coming year he and *van Biesbroeck* will use the interferometer with the 40-inch Yerkes refractor and could look at some stars specified by the spectroscopists.

*Luyten* called attention to pairs with large proper motion and white-dwarf components for the purpose of obtaining masses. Few doubles with a white-dwarf component have short periods. Masses must be obtained through statistics. There is need for close cooperation between double-star astronomers and those working in other fields of astronomy.

*Couteau's* proposal for a table of true anomalies will be considered by Muller and Strand.

*van de Kamp* said that double stars are the first step to multiple stars and perhaps we should start thinking of a symposium on multiple stars.

At the recommendation of van Biesbroeck the *Draft Report* was approved and accepted by those present.