

The President communicated that he was ready to print new instructions for the use of the European code, embodying the alterations made to it during recent years, with respect to equinox, beginning of the year, and Universal Time. This announcement was received with unanimous approval.

Prof. Strömgren recalled that, at previous meetings, the Committee had discussed the question of giving in the telegrams some information about the physical appearance of newly discovered objects, and that Commission 20 (Asteroids, etc.) had requested the Commission to take the matter up again. In consultation with Prof. Van Biesbroeck, he had devised a scheme of nine combinations which he proceeded to describe, whereby it is possible to give information about presence, absence and length of tail, diffuse or nuclear appearance in one figure, which would take the place of the decimal of the magnitude, considered as superfluous.

Prof. Van Biesbroeck suggested that this scheme, which met with approval, might be used in connection with the Harvard code.

The President announced that he would discuss the question with Dr Shapley, and also with Prof. Kobold.

Commission 7. (DYNAMICAL ASTRONOMY.)

ACTING PRESIDENT: Prof. E. Strömgren.

SECRETARY: Mr Felix De Roy.

After having marked his agreement with Prof. de Sitter, when he stated in his report (p. 27) that at the present moment there do not appear to be any problems in dynamical astronomy requiring combined action and international co-operation, the Chairman briefly reviewed those problems in dynamical astronomy which have been studied in the past four years.

They include methods for the determination of orbits and their adaptation to the use of computing machines; multiple solutions in the problem of the determination of orbits; researches on the final state of dynamical systems with slowly varying parameters (e.g. with varying masses), applications, for instance, to the problem of tides; general dynamical problems of stability and recurrence; lunar theory (problems of convergence, non-uniformity of the rotation of the Earth); problems of perturbations (development of the perturbation function, the Trojan group and other asteroid problems, satellites); the restricted problem of three bodies (numerical investigations and their mathematical foundation, the problems of "sorts" and "groups" ["Klassen"]); analytical investigations on the non-existence of periodic solutions in the range of critical commensurabilities); regularization of the singularities of the problem of three bodies; special cases of the problems of 3 and n bodies; general mathematical theory of the existence of rotating figures of equilibrium; relativity—gravitation—light.

Dr Comrie drew attention to the existence of new 7- and 8-figure tables of the six principal natural trigonometrical functions at intervals of $1''$, which he had prepared in collaboration with Prof. Peters; he circulated specimen pages of both works. The price of printing 1000 copies of each volume is estimated at about 12,000 dollars.

It was suggested that the 8-figure tables should be printed first.

Prof. Kopff announced that Prof. Peters had prepared his precession tables for 1950, and that they would be printed as soon as circumstances permitted.

Prof. E. W. Brown then formally moved a resolution which, amended by Dr Comrie as to tables, was seconded by Dr Brouwer, and reads as follows:

“This Committee recommends that Commission 7 be abolished, and that the subject of Astronomical Tables be taken over by Commission 4.”

This resolution was carried unanimously.

Commission 8. (MERIDIAN ASTRONOMY.)

PRESIDENT: Sir Frank Dyson.

SECRETARY: Dr J. H. Oort.

In connection with the plans of the Pulkovo Observatory for removing one of their vertical circles to the southern hemisphere the following recommendation was proposed by Dr Morgan and seconded by Prof. Boss:

“The Commission regards the proposal of the Pulkovo Observatory to establish the Vertical Circle in as nearly equal a southern latitude as possible with great sympathy. We believe this will be of very great value in the improvement of fundamental declinations.”

Dr Lundmark read a report on the programmes for the Lund meridian circle, which programmes include stars of special interest, such as long- and short-period variables, extremely red non-variable stars, B-emission stars, moving clusters, nebulous stars, nuclei of planetary nebulae and of anagalactic objects, etc. The definite programme will contain at least 3000 stars, results for some 400 of which have already been obtained. It is planned to extend the observations to stars in the southern hemisphere as soon as financial conditions will permit the erection of a southern station.

The committee members present seemed generally to agree with the recommendations of the Draft Report about confining future observations by meridian circles to brighter stars. In this connection Dr Kopff remarked on the difficulties which were felt in the observation of the fainter Eros comparison stars. Schlesinger's method of using photographic plates with large fields is considered to be cheaper and more accurate.

With regard to comparison stars Schlesinger remarked that, if they were equally divided over the sky, the stars in the General Catalogue which was being constructed at the Dudley Observatory, would provide a sufficient number of comparison stars. As it is, the number is not sufficient in all parts of the sky and he therefore expressed the desirability of drawing up a list of supplementary stars (the requirement is between 16 and 25 comparison stars for each plate). Kopff remarks that a list of about 40,000 comparison stars, selected by Küstner, has already been observed six times. It would seem desirable to give preference to stars from this list and to the “*étoiles intermédiaires*” in the construction of the supplementary list proposed by Schlesinger. It would probably be possible to avoid faint stars. Dr Morgan provisionally offered the assistance of the Naval Observatory, Washington, for the observation of these supplementary stars.

As regards the photographic re-observation of the A.G. zones the observations are being made with a general co-operation scheme. The northern zones are being re-observed under the supervision of the A.G. In addition to several northern zones which have already been finished, the Yale Observatory is now undertaking the zones between 0° and -30° , whereas the Cape Observatory is observing the zones