

difference between the spectroscopic parallax (S) and the trigonometric (T) was found for each parallax measure. The results for each observatory doing trigonometric work were discussed separately. Means of the differences S—T were formed for each of the 24 hours of right ascension. From these differences, by means of graphical methods or harmonic analysis, systematic corrections were found for each hour of right ascension for each observatory devoted to trigonometric parallaxes.

For zero-point, Schlesinger had adopted the mean of the trigonometric parallaxes, while van Maanen had taken the mean of the spectroscopic parallaxes. The difference for each trigonometric series between the results of Schlesinger and van Maanen is partly explained as due to difference in zero-point. The very great differences for some of the series cannot be explained by the larger amount of material used by van Maanen.

Through the kindness of van Maanen, Mitchell was furnished with the individual differences S—T that had gone into van Maanen's discussion. These differences arranged in increasing order of right ascension were divided by Mitchell into two equal groups, the 1st, 3rd, 5th and all odd-numbered stars in one group, and the even-numbered stars in another. This was done for Allegheny and McCormick on account of their large number of stars. Following the methods of van Maanen, curves were found by harmonic analysis for the odd- and even-numbered stars separately. When these curves were exhibited at the meeting, it was agreed by all present that the large differences between the curves for the two groups of stars were the result primarily of accidental errors. In fact, there seemed little evidence of systematic errors. For the McCormick parallaxes, curves were found in similar manner where the large differences S—T were omitted, and these curves showed periodic terms remarkably small in size. In practically all cases the large differences S—T were from dwarf stars where the trigonometric parallaxes are considered to be more accurate than the spectroscopic.

Dr Schlesinger's announcement of a new Yale catalogue of parallaxes was received with much satisfaction. The catalogue will include all trigonometric parallaxes published before the end of 1933. The members of the Commission unanimously agreed that the catalogue should include a discussion of systematic errors of the various trigonometric series and of the spectroscopic parallaxes as well. It was further suggested that the catalogue might give in parallel columns two values of the trigonometric parallax, namely, both before and after the application of systematic errors.

Commission 25. (PHOTOMÉTRIE STELLAIRE.)

ACTING PRESIDENT: M. Jules Baillaud.

SECRETARY: Miss Cecilia H. Payne.

The Committee expressed its appreciation of the value of the work done by Prof. Seares, while President of the Commission, in the direction of establishing the relations between various other catalogues and the International System.

The relations given by Prof. Seares, in the Draft Report, between the International System and the catalogues that have appeared during the last four years, form a new and very important contribution to this fundamental problem. But nothing in science can be definitive. The formulae given by Seares will be subject to modification by more extended discussion: they must be regarded as provisional; the Committee decided to place them in an appendix to the main report.

The Commission, after a discussion of the results given by Seares, received communications from Dr Lundmark, Dr Hertzsprung and Prof. Shapley; it was agreed to publish these also in the appendix of the report.

Commission 26. (DOUBLE STARS.)

PRESIDENT: Prof. E. Hertzsprung.

SECRETARY: Prof. G. Van Biesbroeck.

It was agreed to send a message of congratulation to Dr R. G. Aitken on the occasion of the completion of the *A.D.S.*, a copy of which was for inspection on the table of the chairman.

Aside from minor alterations and additions which were discussed in reading the Draft Report, the Committee adopted this report as printed and designated a sub-committee for the purpose of working out a short list of double stars situated between $+10^\circ$ and -10° declination for the investigation of personal errors. C. P. Olivier, who initiated this proposal, will act as chairman of the sub-committee, which will include R. G. Aitken, H. N. Russell, and G. Van Biesbroeck.

Commission 27. (VARIABLE STARS.)

PRESIDENT: Prof. Harlow Shapley.

SECRETARY: M. Felix de Roy.

The Draft Report was adopted without modification.

The following resolutions were referred to the General Assembly:

1. The Commission recommends that the yearly subsidy granted by the Union to the Cracow Observatory for the publication of the *Ephemerides of Eclipsing Binaries* be continued (and increased) to the amount of 1000 gold francs.

2. The Commission suggests that, in view of the urgent need for comparison stars for Variables, more especially those requiring international co-operation, a small sub-committee under Dr Shapley be empowered to canvass the needs of observers and to take steps to encourage systematic work on sequences.

3. The Commission endorses the proposal made by Prof. Grouiller to compile a list of unpublished observations of Variable Stars, and recommends that this compilation be published by the Union.

In addition, the following proposals were adopted:

4. The Commission heartily welcomes the photovisual work on sequences for Variable Stars inaugurated at the Harvard College Observatory by Miss Cecilia Payne. It notes with approval that the photographic magnitudes of the same stars are also to be determined, so that the Colour Indices, which are essential in any filter work, will be available.

5. The Commission suggests that, previous to the extension of photovisual work on sequences which, in the end, may integrate them into a homogeneous system, visual observers should take up as many variable stars as possible of Series VIII of the *Atlas Stellarum Variabilium*, when it is published by the Vatican Observatory.

6. The Commission strongly urges the prompt preparation and publication of visual sequences for those stars of Prof. Nijland's List A for which no comparison