

After comments and discussion by Messrs Jackson, Jones, Slocum, van Maanen, Gregory and Verbaandert, two resolutions were adopted.

The first was proposed by Dr Jackson.

"Commission 34 recommends that no programme for the determination of solar parallax should be undertaken at the opposition of Eros in 1937, but urges observatories in the northern hemisphere to obtain positions of Eros with instruments comparable in focal length to the astrographic telescopes, and with meridian circles, over as long an arc as possible."

The second resolution was proposed by Prof. Stroobant.

"Commission 34 would welcome a grant of £100 for its work during the next three years, to be used to assist Dr Witt in his investigation of the orbit of Eros."

COMMISSION 35. (STELLAR CONSTITUTION.)

PRESIDENT: Sir ARTHUR EDDINGTON.

SECRETARY: Prof. H. N. RUSSELL.

The Commission spent an hour in a general discussion of problems of stellar constitution. The report as printed was unanimously adopted.

COMMISSION 36. (SPECTROPHOTOMETRY.)

PRESIDENT: Prof. H. H. PLASKETT.

SECRETARY: Dr R. O. REDMAN.

In view of the wide range of topics covered by the Commission, it was agreed that it would be desirable to press for the nomination of a new president for the Commission each three years.

Report

In a discussion of stellar "temperatures" (§ 2.1) Prof. Russell referred to the importance of "excitation temperatures", as determined from the ratio of numbers of atoms in two states of different energy in the atom. Dr Minnaert pointed out that this was essentially only a "brightness temperature" to which Prof. Russell agreed, but added that in this way "brightness temperatures" could be found for those stars for which no measures of angular diameter were available. Dr Kienle and Mr Greaves jointly made the following suggestions on "stellar temperature" designations:

1. The designation "effective temperature" should no longer be used for temperatures which are really only "colour temperatures". The symbol T_e should be reserved for true effective temperatures, defined as the temperature of a full radiator ("black body") which emits the same amount of total radiation as the star.

2. All that can be done by spectrophotometric observations of the continuous spectrum of the stars is to derive relative monochromatic magnitudes. Observers should therefore be requested to publish their observations either in the form of

relative monochromatic magnitudes $\Delta m_\lambda = m_\lambda^* - m_\lambda^0$,

or relative gradients $G = 0.921 \frac{d \Delta m_\lambda}{d 1/\lambda}$,