

Firstly the meeting was opened by the chairman and then apologies for absence were received from Mrs Kramer and Mr Parsons. Present at the meeting were 22 members and 3 visitors. Before the speakers for the evening ~~had~~ were introduced, it was announced that the treasurer, Mrs Pat Kramer had given birth to a baby boy, she and her husband were then congratulated and what is more, they it was the first time that this had ever happened at the Cape Centre. The first speaker for the evening was Dr Cousins, who spoke on Stellar photometry, which is the measurement of the light output of a star. First of all Hipparchus classified stars the brightness of stars in magnitudes. He called the brightest stars first magnitude, those less bright 2nd magnitude ^{and so on}. A star of 1st magnitude is roughly $2.5 \times$ brighter than a 2nd magnitude star. Nowadays, photometers are very accurate, as they can measure brightnesses quantitatively, ~~as~~ compared with the naked eye, which can only measure by comparing one star to ~~the~~ other. The retina of the eye ~~not~~ does not respond the same for all wavelengths nor is the photographic plate entirely reliable, but photo-electric photometry is linear in output and extremely accurate. One disadvantage is, ~~that~~ however that it can only measure one star at a time. Another device is the charged coupling device camera (C.C.D) which ~~works~~ operates like a T.V. camera as it accumulates electrons. When comparing ~~stars~~ the stars, the number scale logarithmic scale is more practical than the number scale and the inverse square law is used to calculate magnitudes. This is so called because brightness is proportional to the inverse of ^{the} distance of the star. After his talk, ^{all} questions were answered and then the second speaker for the evening was ~~the~~ the secretary (Wilfred Duckitt) who ~~spoke~~ gave a short lecture on telescopes. There are two basic types of telescopes, the reflector and the refractor. Refractors are mainly used for accurate measurement of parallax Δ , but are not very popular, as lenses are very expensive, because especially achromatic lenses which correct chromatic aberration. The most popular among amateur astronomers is the Newtonian reflector, which is comparatively easy and inexpensive to make. However the ~~most popular~~ Cassegrain and Coude arrangements reflectors are more convenient for very large telescopes, because of the position of the observer and the shorter length tube as compared with the Newtonian. For Astrophotography, the Schmidt camera is ~~not~~ used most often because of its exceptionally wide field and clarity throughout. For the best results, the a Schmidt camera was combined with the Cassegrain arrangement and ~~also~~ also used a spherical mirror, which is easier to make than the parabolic mirror required for the Newtonian and classical Cassegrain. A simpler and almost as effective system is the Maksutov-Cassegrain telescope, which has a shorter tube than the Schmidt.

After all questions had been answered, the ^{Chairman} ~~president~~ thanked both speakers and the meeting closed for tea.

Signed as correct: ... ^{MSK}
(Chairman)

W.M. Duckitt 13/7