

Minutes of the ordinary meeting of the Cape Centre, held at the SAAO
at 8 pm on 8th February 1984.

The meeting was opened by the chairman Mr Saltykov. Apologies for
absence were received from Mr Issac, Mr O'Pen, Dr Mack and Mr Douglas.

After the minutes of the previous ~~minutes~~ meeting had been read and
regard as correct, the chairman announced that the Cape Centre Trust
would be assisting in bearing the cost of the Cape Observer. On 6th January
the Cape Centre was host for the presentation of the McIntyre award to
Prof. Warner for his work on the life of Herchel and McIntyre. The
informal meeting of 28/29th January at Rivers River in the Beaudenberg was
attended by 14 people. It was also announced that there would be an
occultation of the moon by γ Gauri on 11/4/84 at about 21.18 SAST. We
were also reminded of the photographic ~~contest~~ competition - the subject being
the moon. The Natal Centre is having an Amateur weekend on 3 to 6th
May. Volunteers to attend and give a talk are required. Dr Gault
also asked for volunteers to take an astronomy at Waterford between
21st and 28th March.

The speaker for the evening was Dr Dave Honey, from Utah. He
received his doctorate ~~at~~ at Brigham Young University for his work on
Cepheid Variables about which he would be giving his talk.

Cepheid Variables are bright variable stars. In about 1900 Henrietta
Leavitt discovered that the ~~log~~ of the period was proportional to luminosity.

By 1920, when external galaxies had been discovered and the theory
of relativity was known, Cepheids were being used for distance measuring.

~~Parallel~~ Cepheids however still gave an error of a factor of 5 compared
to ~~parallel~~ ^{methods} ~~parallel~~. By 1975 about 7 Cepheids ^{contained in young clusters} were known ~~distance wise~~ ^{there}
are about 2000 Cepheids in the Magellanic clouds and between 1 and 5 in other
galaxies.) ~~contained in young clusters~~ Using the H β and lines to get
redshift and ~~Parallel~~ ^{of thought} to measure distance, there were now two schools,
one had a large Hubble constant ^{and a} small universe universe with a maximum
age of 10×10^9 years. The second said that the universe was more like
 20×10^9 years old, the age of the oldest stars.

a lot of work was done to eliminate the problem of interstellar dust ~~not~~ by observing in the infra red, and to eliminate the effect of the unstable area in the life cycle of the cepheid - by using blue and red cepheids. It was found that there was almost no absorption of interstellar dust, and that there are two types of ~~the~~ cepheids. ~~They~~ are found in the LMC one in the SMC - thought due to the SMC having $\frac{1}{3}$ to $\frac{1}{5}$ of the amount of metal.

All this work pointed to supported the second school, and it is now thought that the universe is 20×10^9 years old.

Mr. Edmunds thanked the speaker and the meeting was closed for tea at 9.15 p.m.

Signed as correct

Edmunds
Chairman.