

Minutes of the ordinary Meeting of the Astronomical  
held at SAAD on Wed 11th of March 1981  
at 8 pm

Present were the Chairman Mrs Pat Booth  
~~23~~<sup>23</sup> Members and 3 Visitors

Apologies for absence were received from Mr  
Utley and Doctor Feast.

Professor B. Warner gave a talk on "Polar"  
There are many such "Polars" in the sky.

The prototype is A.M. Herstal.

They are close binary stars in which  
one component is a normal star and  
the other a white dwarf or neutron  
star i.e. having very great density and  
consequently a very strong magnetic  
field at the surface - about a million  
gauss as compared with earth which is  
about  $\frac{1}{10}$  gauss. One can determine  
magnetic fields of white dwarfs by  
doppler shift methods but if an  
extensive hydrogen atmosphere is  
present, the H $\alpha$  absorption lines become  
rather broad and one cannot measure  
the doppler shifts accurately. In recent  
times we have been examining x-ray  
sources from above the atmosphere.

In the case of the aforementioned  
model of a close binary we know  
that of a very ~~large~~<sup>strong</sup> magnetic field  
is present, x-rays will be given  
off. Hence <sup>from</sup> our ~~can~~ detection of  
x-rays from them we can deduce  
that there is a very strong

magnetic field and Doppler shift measurements are thus not necessary.

Smooth 8/4/81.  
Chairman

Minutes of the Ordinary Meeting of the Cape Astronomical Association held at S.A.A.D. on wed 8th of April 1981 at 8 pm

Present were 25 Members and 4 visitors  
The names of 3 new members were mentioned.

They are M. Duncan, A. Dyer, R Sessions.  
Apologies for absence were received for Swart, Husby, Bentley and Utley.

A film evening was announced - to be held at the U.S. Information Service on Wed 22/4/81

Dr Slog visiting from Edinburgh said a few words.

The Talk by Dr Alastair Walker was on the subject "Uranus" to commemorate its discovery by Herschel 200 years ago.

Herschel, a musician, moved from Germany to England. He searched the sky for close optical pairs to determine parallax.

He saw Uranus and its non-stellar appearance and thought it to be a comet. It had been observed 22 times previously including

6 by Flamsteed. Herschel acquired a 4 8" telescope and saw it was a planet.

He called it Georgian but Bode's name Uranus was accepted. Then its moons were discovered. Then nothing new was learned about it until in 1977 & it was