

**CAPE ASTRONOMICAL ASSOCIATION.**

---

---

**Annual Meeting, June 11, 1919.**

---

---

The Annual Meeting of the Association was held at the gallery of the Owl Club, Cape Town, on Wednesday, June 11th, 1919, at 8 p.m. Mr. A. W. Long, Vice-President, being in the chair.

---

**ANNUAL REPORT.**

In presenting this, the Fifth Annual Report, your Committee have pleasure in recording the continued usefulness of the Association in fostering the study of the heavens and astronomical knowledge generally

**MEETINGS.**

During the period under review your Committee have met five times, and there have been eight general meetings of the Association. Owing to the prevalence of the influenza epidemic, no meetings were held during the period October–November, and the month of January was observed as a recess.

**LECTURES.**

The lectures and papers read before the Association have maintained their high standard of excellence, as the following synopsis will show :—

1918.

July 11.—“The Scintillation of the Fixed Stars.” By Mr. A. Bull.

Aug. 14.—“Saturn.” By Mr. A. Long.

(Paper printed and circulated.)

Sept. 11.—“Modern Ideas as to the Nature of Light.” By Professor Lewis Simons.

1918.

Dec. 11.—“Progress of Astronomy during 1917.” By Mr. C. Jennings Taylor, F.R.A.S.

“Sirius.” By Mr. H. W. Schonegevel.

1919,

Feb. 13.—“The Philosophy of Astronomy.” By Mr. R. T. A. Innes, F.R.A.S. (Director, Union Observatory.)

Mar. 12.—“Astronomy for Beginners.” By Rev. Andrew Graham.

April 9.—“The Nebulae.” By Mr. G. P. Lestrade.

May 14.—“Neptune.” By Mr. A. Bull.

“The Sundial at the Castle,” Cape Town. By Dr. J. Lunt.

(Paper being printed for circulation.)

Many of the above papers were illustrated by lantern slides and diagrams.

#### LIBRARY.

Your Committee are especially pleased to record the establishment of the nucleus of a Library of Astronomical Literature. A number of works have been presented to the Association from various sources; your Committee greatly appreciate the gifts. It is trusted that the number will be augmented during the coming year, by purchase or otherwise. It is felt that such a library, accessible to members, will greatly increase the usefulness and popularity of the Association.

Through the courtesy of the British Astronomical Association the journals of that Association, in the library, are now completed from the first volume, and are available for the use of members.

#### FINANCE.

The Balance Sheet will show that the finances of the Association continue to be satisfactory.

#### MEMBERSHIP.

Six new members have been elected during the past year, and there have been four resignations. Seven other names have been deleted from the list of members in accordance with the rules.

#### OBSERVATIONS.

Reports of Observing Sections will be presented separately by Directors of Sections. A comet was discovered by Mr. W. Reid

3

Director of the Comet Section, at Newlands on the evening of 11th June, 1918, particulars of which are given in report of Comet Section. The Association congratulates Mr. Reid on having been awarded the Comet Medal of the Astronomical Society of the Pacific.

(Signed) JOSEPH LUNT,  
*President.*

H. W. SCHONEGEVEL,  
*Hon. Secretary.*

---

#### **REPORT OF VARIABLE STAR SECTION FOR THE PERIOD ENDED 31st MAY, 1919.**

(Presented By Mr. J. F. Skjellerup, Director.)

In presenting this the second Annual Report of the Section I should like to refer to the great loss sustained by workers in this branch of Astronomy in the death of Prof. E. C. Pickering of Harvard College Observatory, from whom we have received much valuable material and information necessary to our work.

At the beginning of the year we had 68 variable stars on our list, 40 have been added during the year so that at the present time 108 stars are being regularly observed. 2,687 observations were made by Mr. Long and myself during the period covered by this report, more than double the number made during the previous year. The results have been sent to Harvard Observatory at the end of each month.

Mr. H. C. Kolbe of Grahamstown, a member of our Association, has recently joined the Section and commenced observations.

There have also been enquiries from others which will, I hope, lead to further additions to our ranks. We have a large number of charts ready for distribution and I shall be glad to hear from any member who is willing to try his hand, or rather his eye, at this work. Even if only one or two stars be taken to begin with, I am sure that you will soon get so interested in the work that you will be asking for more charts.

J. F. SKJELLERUP.

---

#### **REPORT OF THE COMET SECTION FOR YEAR ENDING 31st MAY, 1919.**

(Presented by Mr. W. Reid, Director.)

During the year a constant watch has been kept of the Southern Hemisphere for new comets, excepting the months of October and part of November, 1918, when the Cape was visited

by the influenza epidemic. Towards the end of March your Director was laid aside by a serious accident, and is not yet able to resume duty. Fortunately Mr. Skjellerup was able to perform part of the work during this period, and the thanks of the Section is due to him, more especially as he was also an invalid during part of the time, and his hands were also pretty full with his Variable Star Section.

*Comet 1918 (a) (Reid).*—A new comet was discovered by your Director on the 11th June, 1918, and reported by him to the Royal Observatory and your Association on the evening of the 12th. The comet at discovery was estimated to be about eighth magnitude. It was a small hazy patch with a slight central condensation. When first seen it was almost in the field with Alpha Hydra, and was rapidly travelling southwards. From three early observations, elements were deduced by both Dr. Halm at the Cape, and Mr. H. E. Wood at the Union Observatories, but as these elements have been published (*Popular Astronomy*, March, 1919, pages 196 and 197) they need not be referred to further. The comet was regularly observed at the Royal Observatory from 12th June to 10th July, 1918, and at the Union Observatory from 13th June to 17th July, 1918. It was not seen outside South Africa, due in all probability to the slowness of communication between other countries at the time. A cable was despatched from the Royal Observatory, Cape, to the Royal Observatory, Greenwich, on the 13th June, but was received too late for observation in the Northern Hemisphere. It was followed by your Director until the second week in August, and was then very difficult in a six inch O.G. The moon was also interfering with observations. What may be said to be the last word about this comet has been received from Mr. H. E. Wood of the Union Observatory, and is as follows :—

“Through the courtesy of H.M. Astronomer at the Cape, I have been able to utilize a series of photographic observations made with the Cape Astrographic telescope. From these observations and also the Union Observatory observations the following normal places have been deduced, using an ephemeris calculated from the preliminary orbit :—

1918—June, 14.0	G.T.	9h. 16m.	38. <sup>s</sup> 4	—	9° 53' 39"
June, 26.0		9 17	58.6	—	20 16 25
July, 8.0		9 20	45.0	—	28 43 3

“These positions have been corrected for parallax and aberration. An orbit was calculated from these places and gave for

the middle place O-C.  $d\lambda - 1''$ ,  $d\beta - 9''$ . This orbit was modified by Carlini's method and the following elements obtained:—

$$T = 1918, \text{ June, } 5.8794 \text{ G.T.}$$

$$\left. \begin{array}{l} \omega \quad 194^{\circ} 54' 6'' \\ \Omega \quad 17^{\circ} 41' 40'' \\ i \quad 69^{\circ} 41' 58'' \end{array} \right\} 1918.0$$

$$\log q \quad 0.04204$$

Representation of middle place O-C  $d\lambda - 3''$ ,  $d\beta - 2''$

“1919, March 12.

H.E.W.”

*Comet 1918 (b) (Wolf).*—This periodic comet was discovered by Professor Barnard in August; it was excessively faint when discovered. Mr. Skjellerup observed it in South Africa early in November, and reported its positions on the 11th and 12th. From that date it was kept under observation until your Director's accident prevented him following it any longer. At its best it was a very small hazy patch with bright central condensation. It gradually got fainter and fainter until it was only just possible to see it on a good night when there was an absence of stars near it.

*Comet 1918 (c) (Borrelly).*—This periodic comet was discovered by Fayet at Nice on 7th August. It was seen in South Africa on the morning of the 20th November, when it was rapidly travelling north. It was a brighter object than either of those described, and had a very short broad indistinct tail. The central condensation was very marked, almost starlike, and seemed to be duplicated on one occasion. It was very near Jupiter on the 25th November. Owing to its rapid movement north, it was only followed for a very short time; an attempt was to have been made to find it on its return journey, but this was frustrated by reasons already given.

*Comet 1918 (d) (Schorr).*—An exceedingly faint comet was discovered by Professor Schorr of the Hamburg Observatory on 23rd November. At Northfield in America on the 6th December, it could only be glimpsed after prolonged looking and averted vision in the 16 inch telescope. At this time it was growing fainter, and as your Comet Section did not know about the discovery until February, no attempt was made to find it.

*Comet Tempel I.* should have come to perihelion about the middle of 1918, and as it was well placed for southern observers, a thorough and prolonged search was made for it. As the weather was good, and the seeing perfect at the time, great hopes were entertained that it would be found. Every little speck near the place where it should have appeared was closely examined, but

without result, and as this comet has not been seen for several returns, it must be placed amongst the lost comets, or comets which have mysteriously disappeared.

As your Director feels he will not be able for some time to keep up the continuous search which he has undertaken in the past, he makes an urgent appeal to members with telescopes to relieve him of a little of the work.

Full particulars will be given to anyone willing to help him, and if he could get a few helpers, a programme could be drawn up whereby the whole southern heavens could be kept constantly under observation.

---

### ELECTION OF OFFICERS.

The following were elected for Session 1919-1920 :—

*Hon. President :*

Mr. S. S. Hough, M.A., F.R.S.

*Hon. Vice-Presidents :*

Dr. A. W. Roberts, F.R.S.E.

Mr. R. T. A. Innes, F.R.A.S.

### EXECUTIVE.

*President :*

Mr. A. W. Long.

*Vice-Presidents :*

Rev. A. Graham.            Mr. C. J. Taylor, F.R.A.S.

*Hon. Secretary :*

Mr. H. W. Schonegevel.

*Hon. Treasurer :*

Mr. H. Stanton.

*Hon. Librarian :*

Mr. A. Bull.

*Committee :*

Mr. A. Humphries, Mr. W. Reid, Mr. H. MacDonald,  
Mr. J. F. Skjellerup.

*Director of Variable Star Section :*

Mr. J. F. Skjellerup.

*Director of Comet Section.*

Mr. W. Reid.

## SYLLABUS.

**July to December, 1919.**

July 9.—“Novae.” By Mr. A. W. Long.

Aug. 13.—The Depths of Space. By Mr. H. E. Wood, M.Sc.,  
F.R.A.S.

Sept. 10.—(a) Progress of Astronomy during 1918. Mr. C. J.  
Taylor, F.R.A.S.

(b) The Velocity of Light (illustrated). Mr. A. Bull.

Oct. 8.—Modern ideas on the distribution and movement of the  
Stars. Dr. J. K. E. Halm, F.R.S.E.

Nov. 12.—“Variable Stars.” Mr. J. F. Skjellerup.

Dec. 10.—Short Papers.