

QUEEN'S UNIVERSITY ASTRONOMY CLUB NEWSLETTER

NEXT MEETING

Date: January 22 (Tuesday)

Time: 8:30 p.m.

Place Ellis Hall, Room 323

Agenda: Dr. Bridle will discuss his experiments to determine if intelligent life exists outside our solar system. Also, this is the annual meeting of the R.A.S.C., and all members should attend.

Celestial Calendar

Date	Time	Event
Jan. 21	17	Moon at apogee (252,570 mi.)
23	06:02	New Moon
	16	Venus in inferior conjunction
24	08	Mercury 6° S of Moon
	19	Jupiter 5° of Moon
27	20	Mercury 0.9° S of Jupiter
28		Venus at perihelion
31	02:39	First Quarter
	12	Mars 2° S of Moon
Feb. 3	11	Saturn 0.9° S of Moon. Occultation.

Astrophotography Without a Clock Drive

The slow motion controls on the equatorial mounts of telescopes such as the 4½" Tasco reflector provide a useful method of tracking the stars with a camera. Only simple modifications are required to provide a suitable attachment point for the camera. It is possible to clamp the camera body to the telescope tube but any arrangement of this kind will aggravate an already difficult balance problem. The counterweight side of the mounting is also tracking with the telescope and a camera is a useful if somewhat expensive counterweight. A short piece of ½" diameter aluminum rod is threaded on one end to fit the camera and clamped at 90° to the counter balance rod. Clamps (known as boss heads) used in science laboratories to attach cross pieces to apparatus stands are suitable for this purpose. The system is easy to use. Align the telescope on a bright object and center the object in the camera viewfinder and firmly clamp the camera. Center a slightly out of focus star on the cross-hairs, open the shutter and follow the star with the slow motion controls. This system obviously cannot be used for very long exposures but the limiting magnitude of a lens can often be reached quite quickly. For example, using an f/2.8 135mm lens, a two minute exposure on Tri-X will show stars to about 12th magnitude if the sky is dark.

Dr. Brian K. Hunter
Queen's Chemistry Dept.

Report of a Meeting in Toronto

On Friday, 11 January 1974, Paul Brown, President of the Kingston Centre and I (Geof. Wyght) were invited by Harlan Creighton, President of the Toronto Centre to dinner at Hart House on the University of Toronto Campus and then to the Toronto Centre Meeting at the McLaughlin Planetarium.

We arrived in Toronto at 5:30 p.m. and went directly to the Planetarium where we met Reverend Norman Green, the Assistant Curator, and his wife. Rev Green, was at one time the National Secretary of the Royal Astronomical Society of Canada and although he lives in Toronto, he is a member of the Hamilton Centre.

During the limited time available Reverend Green gave us an interesting

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tour of the Planetarium and then it was time to dine at Hart House. The Upper Gallery Dining Hall is for faculty only and if you ever have the chance to dine there, I urge you to do so. The staff was curteous, the cuisine very good.

At dinner we had the pleasure of meeting Mr. W. Deever, from the State of Maryland, of Spitz Space Systems, who was helping Harlan Creighton with his planetarium at Seneca College where he teaches astronomy.

Together with Mr. Deever and Rev. and Mrs. Green, we were distinguished guests at the meeting of the Toronto Centre.

Those who had seen the comet gave brief descriptions as to its appearance and location. Even though there were perhaps three observers who had seen the comet on the same evening they each gave a different description. So much for astronomy bearing the quality of exactness!

Chris Smith a student of the University of Toronto gave a slide-show of his stay at Las Campanas Observatory in Chile. Then Paul Brown delivered a short talk on the operations of the Kingston Centre, explaining our dual nature and extended an invitation to all Toronto members to visit the Kingston Centre.

The special event of the meeting was a planetarium show entitled "The Comet Connection" which was conducted by Norman Green. The hour-long show explained the nature of comets in general, presented a plausible theory as to their origin and then focused attention on Comet Kohoutek. It was a worthwhile show and if you plan to be in Toronto before Feb. 24, I recommend that you visit the Planetarium to see "The Comet Connection". Of course, McLaughlin Planetarium is open year-long at Avenue Road and Bloor, Toronto.

After the show, Harlan Creighton gave special thanks to Norman Green and the staff of the McLaughlin Planetarium for the presentation in particular and for allowing the Toronto Centre to use their facilities over the years.

All in all it was an enjoyable evening and Paul Brown and I look forward to returning to Toronto for the Annual Meeting of the Toronto Centre and the National Council Meeting of the Royal Astronomical Society of Canada on Jan. 25-26.

Geoffrey J. R. Wyght
Secretary-Treasurer.

A lack of material has once again caused a shortened version of the newsletter. Any contributions will be greatly appreciated, no matter how small, and can be sent, by Campus Mail to:

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