

QUEEN'S UNIVERSITY ASTRONOMY CLUB NEWSLETTER

NEXT MEETING

Date: March 12, 1974

Time: 8:30

Place: Room 323 Ellis Hall

CELESTIAL CALENDAR

<u>Date</u>	<u>Time</u>	<u>Event</u>
Mar 15	14:15	Last Quarter
16		Mercury at descending node
17	19	Mars 7° N. of Aldebaran
	21	Moon at apogee (251,550)
19	17	Venus 0.9° S. of Moon
20	19	Equinox. Spring begins
21	11	Mercury 0.1° S. of Jupiter
	12	Jupiter, Mercury 6° S. of Moon
23	15	Mercury greatest elongation W. (28°)
	16:24	New Moon

STAR MAPS

Still not sure where the Big Dipper is? Having trouble finding Orion?

Well help is only an 8¢ stamp away. The Department of Energy, Mines and Resources has available FREE of charge a set of 4 star maps showing the sky for the various seasons of the year. In addition they have a set of illustrated folders on astronomy also free of charge.

The address is:

Mrs. M. W. Grey;
Scientific Information Officer,
3 Observatory Crescent,
Ottawa, Ontario
K1A 0E4

STELLAR RINGS, A NEW TYPE OF GROUPING

A new form of stellar aggregation has been discovered by the West German astronomer, Theodor Schmidt-Kaler at Ruhr University, Bochum. While studying the dark clouds of the Milky Way, Dr. Schmidt-Kaler became aware of large numbers of stellar rings, which appear on photographs as regular elliptical groups of stars that are sharply bounded on the outside. He found that typical rings contain between 25 and 200 stars and that the stellar density averages four times higher than in the surrounding field.

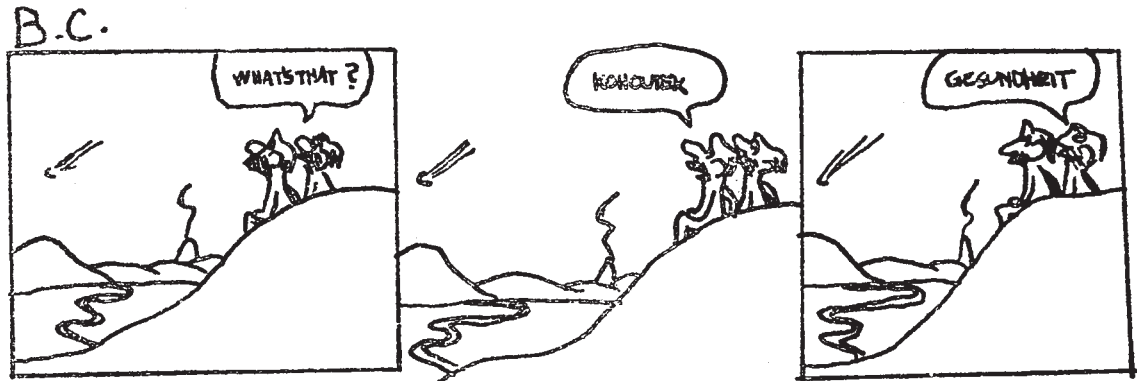
A complete inspection of the Palomar Observatory Sky Survey yielded 1,002 stellar rings, and three more were discovered on the plates of the Lick Observatory Sky Atlas. Statistical tests show that 80 to 90 per cent of the rings are real, and only 10 to 20 per cent are chance groupings of stars.

2.....

Accurate distances within individual rings could be determined in four cases since they contained stars of known absolute and apparent magnitudes. The diameters of the four turned out to be very similar, roughly 23 light-years across, a value supported by determinations in nine other cases, leading to the hypothesis that all rings have nearly equal minor diameters.

On this assumption, the angular diameter of a stellar ring indicates its distance. By plotting the space positions of the rings, the structure of the Milky Way can be charted out to a distance of about 23,260 light-years. The resulting picture is consistent with other models of galactic structure.

Al Cooper.



QUEEN'S UNIVERSITY ASTRONOMY CLUB NEWSLETTER SUPPLEMENT

There is going to be a special meeting of the Astronomy Club on FRIDAY, MARCH 22 at 8:00 p.m. rm. 323 Ellis Hall, especially for those members interested in observing - both seeing and photographing. We will start with a film or short lecture to get things going. While we have some coffee and cookies to get us primed for the cold upstairs on the roof, we will let those who have put on projects already, display some of their results (lets get some good prints, you photo-freaks). Then we will start a long observing session on the 15" and other small telescopes that our observers' group will bring.

We will have several hours of films if the weather is bad, so no one need worry about that.

The purpose of this meeting is twoOfold:

- 1) to let all our members know exactly what is going on;
- 2) to have everyone get the advantage of the experience of the more seasoned observers.

So all of you should come prepared to discuss your projects - real or imagined. We will try to get copies of all photographs with technical data to be put into an album for the use of anyone interested in photography. Also any data formally presented will be written up, compiled and issued as a report to all who attend the meeting.

See you all there.

Paul Brown

REMEMBER: OUR LAST MEETING OF THE YEAR IS TUESDAY MARCH 26!