

# Stardust

A Monthly Newsletter of the  
Royal Astronomical Society of Canada  
Edmonton, Centre

February, 1968

## The Distant Universe Revealed

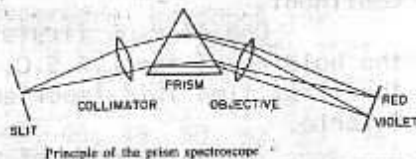
The invention of the telescope marked a great advance in extending our ideas as to the size and beauty of the universe. However, our real knowledge of the universe and its inner workings has come from the use of a scientific tool often claimed to be Man's greatest invention—the spectroscope.

At our Thursday, February 8th meeting the exciting story of how astronomers have discovered the secrets of the stars will be the feature talk by your Stardust

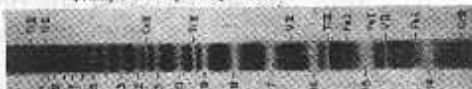
editor Franklin C. Loehde. With the aid of actual working spectroscopes, glowing gases, and colour slides a detailed explanation will be given on how the astronomer, trillions of miles from the stars, is able to "see" with the spectroscope what the eye cannot.

Notice of Motion Regarding Meeting Day A notice of motion was given at the January meeting of the Edmonton Centre by Ralph Haeckel and seconded by Franklin Loehde that the regular meeting night of the Edmonton Centre, R.A.S.C. be the second Monday of each month. The membership will be asked to vote on this important issue at the regular February 8th meeting.

Messier Object Contest In a surprise announcement to members at our January meeting President Allin indicated that he was offering a cash prize to the first observer in the Edmonton Centre who, during 1968, completes the catalog of celestial objects compiled by the French comet hunter Messier. President Allin suggested that if no one manages to observe all the objects listed on page 96 of the Observers' Handbook that the prize goes to the observer with the highest total. Mr. David Roles in this issue of Stardust indicates how easy it is to view some of these star clusters and nebulae with the unaided eye. Good hunting and don't forget to include a brief description of your sighting of those heavenly bodies when you send your report to Mr. Roles.



Principle of the prism spectroscope



The Balmer series of hydrogen in the spectrum of a Cygnus

A Fascinating Story Prof. E.S. Keeping and his close associate Dr. L.R. Crosby unfolded the most interesting past of the Edmonton Centre at the regular January meeting of the Society. Starting with its enthusiastic formation during the depression years the Centre has had a very distinguished role to play. On two occasions its members have done sufficiently outstanding enough work that the R.A.S.C. has awarded the prized Chant Medal to them. Few Centres can boast such a record.

The important work of the Edmonton observers in aiding professional scientists from all over the world was mentioned and Dr. Crosby expressed the hope that this cooperation would continue. A highlight of the Centre's history was the opening of the University of Alberta Observatory in the early forties, a gift of the most outstanding amateur astronomer produced in Canada--Cyril G. Yates. Mr. Yates was a recognized authority in telescope making and his own personally designed mirror grinding machine was a model for amateurs all over the continent.

One of many firsts for the Edmonton Centre was the holding of the R.A.S.C. General Assembly in Edmonton the first time this important event was held west of Ontario.

As an outcome of their excellent talk Messrs. Keeping and Crosby have agreed to turn over their extensive notes over to the Centre for what we hope will be the start of a Centre Archives. Members having interesting anecdotes or photographs of Centre activities are encouraged to send them to the Secretary.

Northern Lights in March We hope to have for a guest lecturer next month none other than one of our Chant Medal winners Dr. F.R. Milton of the University of Lethbridge. It was for his fine work in the study of the aurora borealis that Dr. Milton received the Medal. We hope to confirm this speaking engagement by the February meeting.

STARDUST FORMAT During the next few months you can expect some slight changes in the size and shape of STAR-DUST

Observing Notes by David Roles As indicated at our last meeting President Allin has offered a \$10.00 prize to the first observer who finds all the Messier Catalog objects (except for the few that don't exist). Here's hoping that this will encourage our observers to dust off their equipment and get busy. So far, the number of observing reports that have reached me have been few.

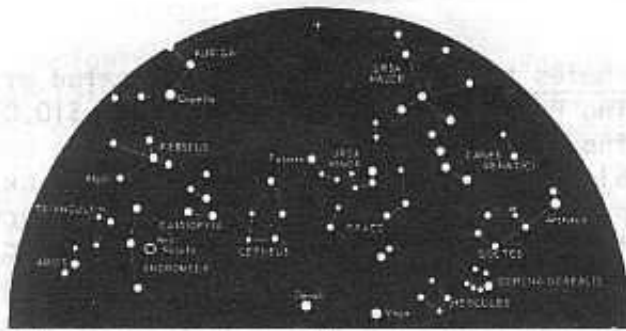
When hunting for Messier objects the use of "averted vision" is very helpful. Instead of looking directly at the object you're trying to find, try looking at it slightly from the corner of your eye (that is look at a point just off to the side of where it is supposed to be). The reason for this is simple: If you look directly at the object the rays of light from it will be focused onto the 'blind spot' of your eye's retina.

Quite a few Messier objects are now visible, and I suggest that those interested in the contest consult page 96 of the Observers' Handbook for details of location etc. The Messier objects that should have priority at this time of the year include the following: M1, 31, 32, 33, 34, 35, 36, 37, 38, 41, 42, 43, 44, 45, 46, 48, 50, 52, 67, 76, 78, 79, 81, 82, 93, 95, 96, and 103. Those underlined are visible either to the naked-eye or with binoculars. Special attention should be given to the open cluster of stars M93 which is close to the horizon in the constellation Puppis. Look for this one before it disappears. I will be giving information on how to find some of these objects at the forthcoming meeting.

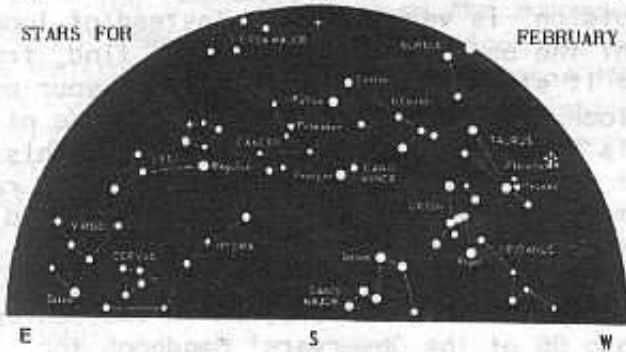
If you plan to join the Messier hunt please give a brief description of each object observed so that Mr. Allin can have at least some assurance that you have seen the right object. A rough sketch of the shape and position of the stars near it would be ideal.

There are no eclipses or meteor showers in February, so this will be a good month to get into the race for the champion Messier hunter.

More Stars-More Work You can imagine the face of our occultation chairman after opening a large envelope from the Jet Propulsion Laboratory and finding a computer-prepared list of 100 occultations for the month of January alone. Now for the good weather!



STARS FOR FEBRUARY



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TO:

Meeting- 8:15 p.m.  
 Thursday, February 8th  
 Rm. V107 Physics Bldg  
 University of Alberta