

DR. GANT'S MOONLORE Discussion Group of January 15 saw about 35 NCA'ers getting better acquainted with moon geography and its history through slides and discussion led by NCA'ers foremost devotee. Nelson Griggs took a tape recording which should prove interesting listening at a later date.

ARMAND SPITZ showed up with Grace Scholz and Mabel Sterns at the special junior meeting Saturday, January 22. He demonstrated some new educational devices which will soon be on the market. One of these was a box-type errery. One feature is a screen on which the shadows of the planets can be cast so that they appear to retrograde just as seen in the night sky. Mr. Spitz talked about the history of erreries from the 18th century. When first invented they were called planetariums. He also discussed the evolution of ideas about planets from the ancient Greeks who regarded them as gods to Copernicus, founder of modern planetary theory. Finally he described a recent trip to Puerto Rico and the thrill of first seeing the Southern Cross in the celestial sky after observing it so many times in the planetarium sky.

"THE STRANGE ACTIVITY OF ARISTARCHUS" by Dr. James C. Bartlett, Jr., in the December issue of the CHICAGO ASTRONOMER, is a highly fascinating account of his investigation of this phenomenon. He began this work in 1949 and expects to finish it in October of this year. The observation of this lunar crater is particularly challenging because it is here, if anywhere on the moon, that peculiar forms of activity are found not to be conveniently explained away by the time-honored theory of difference in the incident lighting. The spectacular phenomena occurring are the violet glare, the extraordinary variability of the wall bands, and the occasional obscurations in various parts of the crater. Dr. Bartlett lives at 300 Eutaw Street, Baltimore 1, Maryland, and is Venus Recorder for the Association of Lunar and Planetary Observers.

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STAR DUST
National Capital Astronomers

February 1955 Vol. 12, No. 6

FEBRUARY CALENDAR

Feb. 5 (Sat.) "THE STUDY OF HYDROGEN GAS CLOUDS IN OUR GALAXY BY RADIO EMISSION", Dr. Lawrence Helfer and Dr. Howard Tatel of the Carnegie Institution, Dept. of Terrestrial Magnetism. Commerce Auditorium, 8:15 P. M.

Feb. 19 (Sat.) DISCUSSION GROUP with Bob Wright. "OBSERVING MESSIER OBJECTS - NEBULAE, CLUSTERS, and GALAXIES VISIBLE WITH SMALL TELESCOPES." Commerce Foyer, 8:00 P. M.

Feb. 19 (Sat.) Try to get your questions for March Panel Meeting mailed to Bob Rhynsburger by this date. Use addressed postcard mailed with this issue of STAR DUST.

Feb. 26 (Sat.) JUNIOR meeting, D. C. Public Library, 16th Street and Lamont, N. W., Branch. Miss Fazekas and the juniors have some interesting plans for the coming months. Parents are welcome to bring youngsters. 7:00 P. M., in basement meeting room.

Each Saturday morning, Telescope-Making Class with Miss Irene Warthen at Chevy Chase Community Center, 5600 block of Connecticut Avenue, 9-12 A. M. Telephone LO 5-4058.

THE STUDY OF HYDROGEN GAS CLOUDS IN OUR GALAXY BY RADIO EMISSION has led astronomers, in the past three years, to change their ideas about the space between the stars. They have discovered that space contains tenuous clouds of hydrogen gas. These clouds are extremely thin but they are very real.

Their existence was predicted in 1945 by a Dutch astronomer, Van der Hulst and they were first detected in 1951 by Purcell and Ewing, using sensitive radio receivers. Today, astronomers in Washington, Holland, England, and Australia are busy examining the distribution of these vast clouds by the radio waves they broadcast. They have already made many surprising findings which will be described in this lecture. Dr. Helfer and Dr. Tatel are using a large radio telescope with a 27-foot parabolic antenna to trace the clouds in the spiral arms in our Galaxy. Some of the discoveries they will report are so recent that they have not yet been published in the scientific journals.

Dr. Helfer is a graduate of the University of Wisconsin who did research at Yerkes Observatory on turbulence in our galaxy. Dr. Tatel holds a Ph. D. degree in physics from Stanford University.

--Benjamin Adelman

THE JANUARY DISCUSSION GROUP was on observing the moon. Since the moon is good observing only a portion of the month the February Discussion Group will consider something to look for when the moon is not in the sky. A very good list of such objects is the Messier Catalog which will be the subject of the Discussion Group on February 19. The program is in charge of Bob Wright.

-----Bob Wright

YOU MAY OBTAIN COPIES OF

<u>Time Table of the Heavens</u> from Ione Alston	\$.20
<u>Astronomical League Bulletin</u> " "	.05
<u>Canadian Observer's Handbook</u> John Lund	.50
<u>Madison Convention Proceedings</u> Grace Scholz	\$1.50

DON'T FORGET APRIL 2. Dr. Cecilia Payne-Gaposchkin, Phillips Astronomer and Chairman of the Department of Astronomy at Harvard University lectures to NCA.

LUNAR OCCULTATIONS FOR FEBRUARY

Date	Star	Mag.	Age	Phase	E. S. T.
1 - 2	BD / 23° 701	7.1	9.2	D	1:06.1 A.M.
2 - 3	121 Tau	5.3	10.2	D	2:12.6 A.M.
3 - 4	BD / 22° 1416	6.3	11.2	D	2:45.1 A.M.
11 - 12	75 Vir	5.6	19.3	R	4:37.2 A.M.
12 - 13	231 b. Vir	6.4	20.3	R	1:35.0 A.M.
12 - 13	236 b. Vir	5.7	20.3	R	2:20.8 A.M.
27	151 B. Ari	6.7	5.4	D	10:34.3 P.M.

OBSERVATIONAL DATA

Mercury is an evening star at the beginning of February. The planet reaches inferior conjunction on the 12th. Venus is a morning star prominent in the southern sky before sunrise. Mars is visible in the southwest early in the evening, moving from Pisces to Aries at the end of the month. Jupiter is in Gemini, well up at sunset and visible most of the night. Saturn is in Libra, rising just after midnight and visible low in the southern sky for the rest of the night.

NEW MEMBERS

- James Campbell, 7 East Melrose Street, Chevy Chase, Md.
OL 2-5335
- Fred Fallon, 9202 Second Avenue, Silver Spring, Md.
JU 9-4409
- William Hutchison, 3718 Manor Road, Chevy Chase, Md.
JU 9-4409
- Marc Inlay, 12014 Georgia Avenue, Silver Spring, Md.
LO 5-8525
- Michael Kobal, 4431 Fessenden Street, N. W., Washington, D. C. EM 2-5934
- *Thomas W. Douglas, Jr., 3739 Appleton Street, N. W. (16)
EM 2-7158

CHANGE IN TELEPHONE NUMBER

William Doying OL 2-8438

CHANGE OF ADDRESS

Donald Ayers, Apt. 55, 730 North Oakland Street, Arlington 3, Virginia

Members of the NCA:

I want to take a few moments of your time to tell you about a special type of program we have coming up on March 5, 1955. On the evening of that date we will have, instead of our usual lecture program, a "Panel of Experts" consisting of five professional astronomers who are leading authorities in their fields. These astronomers will attempt to answer questions put to them by a moderator. These questions ultimately will have come from you, the members of the NCA, and your guests.

For this type of program to be successful requires the assistance and cooperation of all the members of the NCA. There are two important ways in which you can help out: first, by attending the meeting on March 5 and second, by sending in at least three questions.

Now you will find enclosed in the envelope with STAR DUST a post card with my address printed on one side. On the other side I should like very much for you to write down questions which you would like to have asked of the panel. These questions may be about anything within the realm of astronomy. Maybe you've been carrying some questions which you would like to have answered in the back of your mind for some time; maybe the younger folks would like to know how to get started in the field of astronomy as a professional astronomer. I only ask that it not be about flying saucers and things that border on the fantastic. Well, write these questions down on the post card sent you and mail it so that I will get it not later than February 19. It is best that the authors of the questions remain unidentified so you need not sign the cards. You may also turn in questions to me at the February meeting.

The five panel members will be: Dr. Gerald M. Clemence, Director of the Nautical Almanac Office of Naval Observatory, whose investigations have centered in celestial mechanics and the solar system in general; Fr. Francis J. Heyden, Director of Georgetown Observatory, maker of expeditions to many parts of the world in his researches on solar eclipses and the structure

of the Milky Way; Dr. George Gamow, of George Washington University, whose work in theoretical physics was one of the significant links in the development of quantum mechanics, author of several well-known books on the sun and cosmology, and creator of the widely-held postulate that the universe evolved from the "explosion" of one super "atom" only a few billion years ago; Mrs. Simone D. Gossner of the Nautical Almanac Office, Naval Observatory, whose researches are chiefly in prediction of eclipses and occultations and the structure of the Milky Way; and Mr. E. P. Henderson, Associate Curator, Minerals and Petrology Section of the Smithsonian Institution, one of the world's foremost authorities on meteorites. This panel will be moderated by Mr. Charles Federer, Editor of SKY AND TELESCOPE.

I am sure you will find this type of program a lot of fun and it will be more fun if you take part. I am looking forward to it very much and I know you will be, too.

Bob Rhynsburger,
Vice President, NCA