NEW SUPERINTENDENT OF NAVAL OBSERVATORY is Captain Gay Clark who succeeded Captain Wentworth on September 1st. Captain Clark is not a newcomer to the Observatory, having been Deputy Superintendent there for more than a year. Captain E. E. Duvall is now Deputy Superintendent. Captain Wentworth left to teach mathematics at Lehigh University. He is highly esteemed by each member of the staff and will be widely missed.

"THE BOOK OF THE STARS" by Louis Sutherland, 1944, is obtainable at the Public Library.

SEND SNAPSHOTS OF YOUR TELESCOPES to G. R. Wright for projection on the screen. A short description of original features would be interesting.

DETOIT CONVENTION AND NATIONAL BY-LAWS. Mr. Skirm reported on the convention, and asked that a committee consider the draft of the national organization. The president said that an executive meeting would be called to discuss that and other important matters, but as the bulletin goes to press, no date has been set.

1947 ECLIPSE OBSERVERS will try to obtain photographs of the corona in black and white and in color, photographs showing the polarization of coronal light, and spectrograms of the flash spectrum and of the corona. They will measure variation in brightness of the sun's crescent, and time of contacts, and apparent displacement of the stars in order to test the Einstein theory of relativity.

Radio observations will be made of the changes in the ionized layers of the earth's atmosphere. Temperature of the corona near the limb of the sun will be studied, as will the distribution of daylight intensity at various altitudes during the eclipse. A number of new instruments and new techniques are being worked out for use in the observations.

Mabel Sterns, Editor, 2517 K St. N.W. (7) Di. 9422

STAR DUST

National Capital Astronomers
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DATES TO REMEMBER
Oct. 5 "Linkage Systems in Three Dimensions" by Michael Goldberg of the Naval Ordnance Laboratory. 8 p.m. at Commerce Auditorium.
Oct. 12 Variable star group, Morgan Gilley, leader, 8 p.m. at Naval Observatory, rain or shine. Show your membership card at the gate.
Oct. 19 Discussion group, 3 p.m., foyer of Commerce Auditorium. Morgan Gilley, Chairman.
Oct. 26 Visit to Georgetown Observatory. Meet 7:15 p.m. at steps of the University, opposite the statue in a circle, 37th and O Sts. N.W.

COMMERC AUDITORIUM, 14th Street N.W. between Constitution Avenue and D Street, won the approval of those who attended the September meeting, so henceforth our lectures will be given there.

TWENTY-FIVE PERSONS ATTENDED THE VARIABLE STAR session. Mr. Gilley began by instructing them in the use of the telescope and how to read the positions of stars. Ground work will be continued on Oct. 12.

MEMBERSHIP CARDS must be shown at the gate of the Naval Observatory. Visitors may accompany members.

A SIMILAR NUMBER met for discussion September 21st and selected Duncan's "Astronomy" for study although some preferred to remain auditors. A question box was started (no astronomical questions too trivial). It was also decided to allocate part of the time to constellation study. Mr. Gilley will direct the group in so far as his time allows.
**ELEMETARY ASTRONOMY CLASS** to be taught by Father Heyden at Georgetown Observatory beginning September 30. As reported at the discussion group, it will probably be held two nights a week, 1½ hours each, and be open to both men and women who have some knowledge of mathematics.

"SOME QUESTIONS APERTAINING TO ATOMIC POWER" was the title of a most informative lecture by Dr. Paul R. Heyl on September 7th in the Commerce Auditorium. Dr. Heyl considered it proper at this time, omitting all mention of military applications, to consider the prospective use of the energy evolved by the fissioned atom as the motivating force in transportation and manufacture.

Beginning with the computation of the diameter of the molecule by Young in 1805, Dr. Heyl traced the development of chemistry up to the splitting of the atom by Rutherford in 1919 and discussed the application of chemical and physical theories to astronomical thinking, especially the efforts to explain the source of heat of the sun. These efforts produced nothing but untenable hypotheses until the announcement by Einstein in 1905 of the formula for the conversion of mass into energy, \( E = mc^2 \), in which "c" is the velocity of light. This conversion explains at once the source of atomic energy and the continued evolution of heat by the sun.

The employment of atomic power entails certain difficulties of a practical nature. It is Dr. Heyl's view that these can be overcome, but that the present apparent availability of uranium ores does not warrant a prediction that coal and petroleum will be replaced. It now seems that the use of atomic power may be limited to those uses where weight and space are tremendously vital and paramount to cost and availability of raw materials.

---George L. Skirm, Sr.
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