

Final Compton Lecture Last Night

Struve On Binary Stars

Dr. Struve delivered the fifth of his series of lectures on modern astronomy Tuesday night. An audience of about 1200 heard the world-renowned astronomer speak on "Binary Stars and Variables."

Dr. Struve emphasized in his talk some of the observable features of multiple star systems, and pointed out the important conclusions gained by these studies.

Considered Binaries in Detail

He first considered in detail the binary system composed of the bright star Sirius and its smaller companion. This system is marked by the fact that the faint star is a white dwarf star, the first known. An extensive study of this star has revealed remarkable properties, including a very high density. Research on this star, and on others similar to it, had led to great advances in stellar evolution theory.

Using slides showing spectrographs and motion curves, Dr. Struve then discussed the large group of multiple systems known as eclipsing variables. These systems, in which a faint star periodically obscures the light of a brighter companion, have been under intensive study for several years, and have been useful in adding to our knowledge of stellar mass and motion. Dr. Struve employed the example of the star Beta Lyrae to point out some remarkable features of this group of stars.

Astronomy Still Open

In his opening remarks, Dr. Struve commented that astronomy is still an open field, for very little is known of stellar processes. He stated that he thinks of himself as an "explorer" in the many available fields of astronomical research.

Dr. Struve completed his series of lectures last evening when he spoke on "Man and the Universe." This afternoon, at 4 P.M. in Kresge, Dr. Struve will participate in a seminar on the subject "Cosmological Theories."

Radio Discussed in Astronomy

Dr. Otto Struve, in his fourth lecture on the universe, stated that radio astronomy has become in the last ten years one of astronomy's greatest instruments. Speaking before a capacity audience Thursday night at Kresge Auditorium, Dr. Struve, Director of the National Radio Astronomy Observatory, gave a historical account of radio astronomy, and discussed some of its present applications.

Modern Astronomy Traced

The eminent astronomer traced the latest phase in modern astronomy from its founding in 1931 by radio engineer Karl Jansky, through its development by Grote Reber, to its present position. Dr. Struve himself deserves credit for recognizing the value of Reber's work and publishing it in astronomical journals.

Dr. Struve showed slides of several large American radio telescopes, and described briefly the work of the National Observatory at Green Bank, West Virginia. This observatory, originally suggested by Dr. Stratton, hopes to erect a 1,000 foot radio telescope soon, and is considering the construction of an 1800 foot instrument.

Radio Telescopes Used

Dr. Struve stated that our galaxy's structure is much better understood since its study with radio telescopes. He showed a map of the galaxy's features, prepared from study of radio signals, and showed that the galaxy's center resembles a great globular star cluster.

Although entire galaxies have been the objects most closely studied by radio astronomy, Dr. Struve expressed hope that individual stars would soon be observed by this method.

Senior Week & JP Committees Elected

The results of last Tuesday's elections for Senior Week Committee and Junior Prom Committee have been announced by the Secretariat.

Elected to Senior Week Committee are: Addison Ball of East Campus; Anthony Caserta of Lambda Chi Alpha; Harold Dodds of Baker House; Sheldon Epstein of Baker House; Linda Greiner of Bexley Hall; Richard Julien of Phi Delta Theta; William Kleinbecker of Delta Kappa Epsilon; Kenneth Myers of East Campus; Edward Neild of Sigma Chi; and Henry Piehler of Phi Gamma Delta.

Elected to Junior Prom Committee were Marilyn "Buz" Arsey, of Bexley; Francis Berlandi, of Phi Kappa Theta; Curtis Hoffman of Lambda Chi Alpha; Raymond Landis of Phi Delta Theta; and Edward Linde of Sigma Alpha Mu.

Yuletide Cheer Planned

The annual Institute Christmas convocation will be held on December 16, from 11 A.M. to 12 P.M., in Kresge Auditorium. The principle speaker will be the Reverend Dr. Sidney Lovett, Chaplain Emeritus of Yale University. Institute classes will be cancelled at the time of the convocation. The service will be open to the entire MIT community.

Federal Loan Funds Rejected by Schools; Loyalty Oath Cited

Harvard, Yale, and fourteen other universities have rejected federal student loan funds made possible by the National Defense Education Act. Their reason for turning back the money is their objection to the requirement of a loyalty-oath affidavit by the recipient of the loan.

The objectionable passage is an oath stating "that (the student) does not believe in, and is not a member of and does not support any organization that believes in or teaches the overthrow of the United States Government by force or violence or by any illegal or unconstitutional methods." President Nathan Pusey of Harvard has called this requirement "misguided" and "discriminatory". President A. W. Griswold of Yale declared that it "is contrary to the classic principles of our college and universities."

MIT has thus far taken no money on the loan fund, since the Institute's own loan funds are adequate to meet all needs. James G. Kelso, Executive Assistant to the President, noted that since the need has never arisen, "no decision has been made on what would happen if the funds were to be accepted. . . We haven't faced the issue, and have seen no occasion to take a stand. . . For this we are grateful."

Admiral Cochrane Dies; Headed Industrial Liaison

Vice Admiral Edward Lull Cochrane died last Saturday, November 14. He was Vice President for Industrial and Governmental Relations, Emeritus, and Special Adviser to the President. He was 67 years old.

Born at Mare Island, California, in 1892, he was "graduated with distinction" from the United States Naval Academy in 1914, and several years later he was assigned to MIT for ad-

vanced work in Naval construction, for which he was awarded his master's degree in 1920. For the next twenty years he held many important naval posts. He was named Chief of the Bureau of Ships, with the rank of Rear Admiral, in 1942, and was in charge of the country's entire wartime naval construction program.

Cochrane was promoted to Vice Admiral in 1945, and in the following year he was appointed Chief of the Navy Material Division of the Office of Assistant Secretary. In 1947 he was named to the President's Advisory Committee on Merchant Marine, and the same year he retired from active duty in the Navy to assume the position of head of MIT's Department of Naval Architecture and Marine Engineering.

Was Dean of Engineering

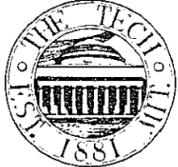
In 1950 he was appointed by President Truman to be chairman of the Federal Maritime Board and Maritime Administrator in the Department of Commerce. In 1952 Admiral Cochrane returned to MIT as Dean of the School of Engineering, and was appointed Vice President for Industrial and Governmental Relations in 1954.

Cochrane held the Taylor Gold Medal, the Distinguished Service Medal, and was an honorary Knight Commander of the Order of the British Empire.



The late Edward Lull Cochrane

The Tech



NEWSPAPER OF THE UNDERGRADUATES OF THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

VOL. LXXIX No. 42 CAMBRIDGE, MASSACHUSETTS, FRIDAY, NOVEMBER 20, 1959 5 Cents

Housemaster Plan Evaluated after Year of Operation

Burton Housemaster Deemed Success by Student, Dean

Expansion of the housemaster system will continue, according to Frederick G. Fassett, Dean of Residence.

He said, "The first year (of the housemaster system) met with such success that we will move on." There is no indication of when this will occur, however.

Both Dean Fassett and Professor Bartlett, Burton Housemaster, are very happy with the progress made under the housemaster system in the past year.

Dean Fassett also expressed approval of the Dormitory Council reorganization as "ideally suited" to the type of dormitory they are trying to create. He stated that when, as in the Housemaster System, problems are settled in the house, the house takes on an individuality. This is one of the main purposes of the Housemaster System.

He also said that the system has "succeeded in very large measure" in meeting the "often expressed desire for greater contact between students and teachers." Professor Bartlett sees many students with problems and the number is increasing.

Dick Greenspan, '60, Burton president feels that the system is very successful in Burton. Professor Bartlett also feels that an important advantage of the Housemaster System has been the ability of the Housemaster to deal directly with many problems arising within the house. The housemaster has basically, however, a counseling and administrative responsibility.

The housemaster is responsible for the house tutors and works with the house committee. He also has funds at his disposal to be used for the better-
(Continued on page 6)

Senior House Discusses Duties of Master

By John Scott, '63

A description of what a housemaster could and should do was formulated Tuesday evening by the Senior House Committee in an open meeting.

Two basic jobs of the housemaster were described in the meeting which was held by Senior House President Al Krigman, for the most part, to a discussion of these jobs.

Counseling Main Function

It was the opinion of most of the members present that the housemaster should, at least through his tutors, know the residents of the house well enough to provide counseling where needed. It was pointed out in the discussion that this counseling should be of both an academic and a social nature. This counseling should be one of the housemaster's main functions.

It was also the general opinion of the house committee that the housemaster should be well enough informed on what is going on in the house to be a source of help to any individual or committee which might need his help or advice. It was strongly pointed out, however, that unless the housemaster felt something was entirely wrong, his role should be a passive one. It was noted in certain fields, such as those handled by the facilities committee, he could be of a great deal of help.

Want "Bull" Sessions

When the meeting turned to the subject of whether or not the housemaster system was wanted, Krigman reminded the committee that no matter what the feeling of the group was, there would be such a system in one form or another. The discussion was then turned to what could be done to make the present system more effective. The opinion of the group seemed to be that the biggest shortcoming of the present system that could be remedied immediately was the tutors did not even know all the people in their areas. One way of alleviating this situation, it was decided, would be a few informal "bull" sessions.

Argentine Students End Visit Here



From left to right: Ira Jaffe, '61, Roy Wainwright, '61, Humberto Gussoni, Ricardo Foulkes, Argentinian visitors, and Bill Strauss, '61. — Photo by Dick Marks, '62

Indian Businessmen Study Management Under Ford Grant

Members of India's top business management will participate in a series of executive development seminars to be conducted in India during the next three years by the School of Industrial Management.

The program, based on a new \$175,000 grant from the Ford Foundation, was announced by Dean Howard W. Johnson. It is an outgrowth of an Indian movement to improve business management and was undertaken by MIT at the invitation of the Ford Foundation, Dean Johnson said.

To Attend Seminars

About 30 Indian business leaders are expected to attend each of the four-week seminars to be held July 4-29, beginning in 1960, in the Palace Hotel, in Srinagar, the capital of Kashmir-Jammu. Each session will be followed by two one-day local conferences, with an expected attendance of about 1,000 for each, in other Indian cities.

Dean Emeritus F. P. Brooks of the School of Industrial Management will head the faculty group for the 1960 seminar, but members will come from other American universities as well as from MIT. Selection of the faculty, which will include the foremost U. S. experts available, has not yet been completed.

Johnson Arranged Meetings

Dean Johnson, who traveled 6,000 miles in India last spring in arranging the seminars, said they would deal with five broad topics. They are:

Management economics, including fiscal, trade and tax problems; corporate finances; human relations and communications; organization; and business policy.

The seminars are a result of "a great deal of ferment in India for management education," Dean Johnson said. The proposal for the courses was made to the Ford Foundation by the All-India Management Association and they have the support of India's National Productivity Council. "Should Produce . . . Understanding"

"We don't pretend that we can provide 'answers,'" Dean Johnson said. "Rather, the joint exploration of important management issues by the executives and the faculty members should produce a clearer understanding of the role and responsibility of businessmen in India just as it would in the United States." He said it is hoped that the seminars can perform a "catalytic function" for India and Indian management in a time of rapid change toward an industrial society.