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Fermilab Welcomes Users Friday

The Fermilab Users Organization will hold its 12th annual meeting in the auditorium Friday, May 5. Some 914 members have been invited to the day-long session.

Dr. Lawrence Leipuner, chairman of the organization's executive committee, said, "This has been a very interesting year, and all indications are that the next should be no less so. A primary purpose of this organization and its annual meeting is to inform the users at Fermilab of the future plans of the Laboratory and to provide some input into these plans. I urge users to attend," he said.

A special report will be given by E. Gabathuler of the European Organization for Nuclear Research (CERN), Geneva, Switzerland.



... Users office staffers P. Hale (L), C. Sazama-Reay prepare for 1978 membership meeting...

At a 9:30 a.m. opening session, reports will be given by: Leipuner on behalf of the Users Executive Committee; Norman F. Ramsey, president, Universities Research Association, Inc.; and R.R. Wilson, Fermilab director, speaking on "The Future of Fermilab."

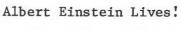
Rounding out morning reports will be: Russ Huson, Accelerator division head, presenting future accelerator developments at 10:30; and Gabathuler of CERN, at 11:30 a.m.

An experimental areas session is set for 2 p.m. Reporting will be: <u>Dennis Theriot</u>, Neutrino; <u>Thornton Murphy</u>, Proton; and <u>Tim Toohig</u>, Meson. <u>John Peoples</u>, Research Division head, will give an overview of experimental areas at 3 p.m. Concluding the business session will be a panel discussion on the future experimental program at Fermilab. Huson, Peoples and Leipuner will join R.K. Adair, <u>E.L. Goldwasser</u>, M.J. Longo, and M.J. Shochet for the panel.

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USERS CENTER HOURS REDUCED FRIDAY

Due to the Users annual meeting, the Users Center will not open until 8 p.m. Friday (May 5) for regular business. Users meeting participants will eat lunch in the cafeteria at 12:30 p.m. on Friday; employees are asked to eat before 12:30 to receive prompt service.



In

"ALBERT EINSTEIN--A MOTET"

Monday, May 15 7:30 p.m. Fermilab Auditorium

Albert Einstein is alive and well and coming to Fermilab. The Nobel Laureate and father of the relativity theory will be recreated in a one-man show set for the Fermilab auditorium. Employees/experimenters, their families and guests are invited to the free program. Tickets will be required for admission.

Teacher-actor William Landry will portray Einstein the man--a sensitive humanist with an undying love for violin music--to Einstein the philosopher--a metic-ulous researcher with a deep respect for theoretical and practical science.

The entertaining, educational performance is designed for adults and older high school students. At the end of the play, Landry will answer audience questions. The Laboratory is offering this special

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.. William Landry as Albert Einstein.

production because Dr. Einstein's scientific and philosophical ideas represent a blend of the best of scientific and humanistic traditions.

A special performance will be presented at 1 p.m. Monday for college and high school student groups.

Landry is employed on a show tour by the Energy Education Division of Oak Ridge (Tenn.) Associated Universities, Inc. ORAU, a non-profit organization that operates Oak Ridge National Laboratory, has sponsored traveling programs on energy-related topics for several years.

The Fermilab program is sponsored in part by funding from the Illinois Humanities Council, which also supports the programs of the Fermilab Science and Humanities Lecture Series, and by Commonwealth Edison Co.

For tickets, contact the Guest Office, CL-1W, Ext. 3124.

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SPEAKER RELATES PLANETS, EARTH'S WEATHER

"The Climate and the Inner Planets," a free public lecture, will be given at Fermilab on Wednesday, May 10.

Speaking at 8 p.m. in the Fermilab auditorium will be Dr. Richard Goody, Mallinckrodt Professor of Planetary Physics, Center for Earth and Planetary Physics, Harvard University.

Runaway ice ages, dust storms and smog/pollution will be among topics Dr. Goody will discuss as examples of effects of planetary phenomena on Earth's climate. Data returned from Viking and Mariner space missions, plus material from history, archeology and geology, will illustrate the talk.

A native of England, Dr. Goody was educated at Cambridge University. He has authored over 70 papers on meteorology, spectroscopy and astrophysics. He joined Harvard in 1958.

A question period and informal reception for the speaker will follow the program.

The program will be sponsored by the Amoco Research Center Sigma Xi Club. Host institutions for this local Sigma Xi chapter are Fermilab, Amoco and Wheaton College. Sigma Xi, Scientific Research Society of North America, was formed "to encourage original investigation in science, pure and applied."

Sharply rising electrical power bills are forcing Fermilab to slow down its experimental program.

Since December, the Laboratory's electric bill has risen dramatically. So much so, in fact, that had accelerator operations proceeded as planned, an unexpected \$600,000 increase in power costs for FY 78 would result. John Peoples, Research Division head, provided the background while announcing emergency measures to meet the crisis.

According to Peoples, energy-saving strategies are being implemented:

Shutdown times for accelerator studies and maintenance development work will be extended. Minor shutdowns will be extended a day, from two to three days; major shutdowns will be extended by as much as two weeks. One, starting May 22, will be stretched from two to almost three weeks; an August shutdown, originally planned for four weeks, will be lengthened to about six weeks. Between May and September, the accelerator will be "turned off"--unscheduled --for about two of the five months, significantly reducing electrical consumption.

The operation mode of the accelerator will be modified to an energy-saving cycle, conserving as much as 15 percent in power usage.

According to Peoples, Commonwealth Edison Co. is passing along increased power production costs related to the recent severe weather and coal strike. Three main factors determine Fermilab's electrical bill. They are: monthly minimum energy the Laboratory (via the Department of Energy) has contracted to use; excess energy used above the minimum; and the utility's "Fuel Adjustment Cost (FAC)" figure. The FAC, a variable surcharge for production expenses, is the cause of Fermilab's current power cost crisis.

The Laboratory's FAC charges, Peoples said, have increased monthly since December. An increase in the FAC from about 0.1 cent per kilowatt hour to 0.3 cents/KWH was anticipated between November '77 and September '78. However, the FAC has already reached 0.4¢/KWHR in April with further increases expected in May. The FAC factor is expected to account for nearly 30 percent of the cost of electricity in May.

When the cost crunch developed, Laboratory officials met with utility representatives for advice. They indicated that the FAC would probably keep rising through June. This bad news resulted in bad news for experimenters—who are most affected. This is because the use of power for Fermilab's experimental program accounts for about 85 percent of total Laboratory electricity use and is the single area where large savings can be gained—but only by stunting the experimental program.

Fermilab's average monthly power bill for the first four months of 1978 was about \$800,000. The Laboratory is appealing to the Department of Energy for special funds to buy more electricity in order to eliminate or reduce the slowdown in the experimental program. Since 1970, Peoples said, DOE has made some special grants to other laboratories to offset surprise fuel increases. In the meantime, some measures to reduce power have already been taken.

The Energy Doubler, which was planned to enhance the Laboratory physics program by providing an energy of 1,000 GeV, will also permit a significant reduction in power consumption. The superconducting ring of Energy Doubler magnets will require only one third of the power of the present magnet ring when it operates at 400 GeV.

It is planned to begin testing two Energy Doubler magnets in the switchyard during the summer. Ultimately, these tests will provide the knowledge to allow the switchyard group to replace the 56-magnet left bend in the Meson area with Energy Doubler magnets.

In addition, several other large electromagnets are scheduled to be converted to superconducting coils. The former University of Chicago cyclotron, moved here in 1972, is being converted to superconducting operation for the fall of 1978. Plans are being developed to convert the 30-inch bubble chamber magnet. The Meson laboratory is preparing to replace conventional magnets in the M-6 beam line. A \$5,000 allocation has been earmarked for a pilot program to save electricity in the Meson detector building.

"When the projects are completed,"
Peoples said, "there will be a significant
reduction in the Laboratory's demand for
electrical energy."

S.R. Higgins

IN MEMORIAM

Sterling R. Higgins
November 1, 1935 - April 28, 1978

Sterling R. Higgins, 42, a Fermilab employee since 1974, suffered a fatal heart attack Friday and died at Loyola Hospital. Mr. Higgins, a Maywood resident, joined Fermilab as a janitor and was named a janitorial group leader in 1976.

Mr. Higgins' supervisor, <u>Dave Sauer</u>, Site Services head, said, "The staff, users and friends of Fermilab all relied on Sterling's dedicated attention to a multitude of tasks to make the Laboratory environment a pleasant place. The Fermilab community lost a most friendly, willing and dedicated co-worker."

Survivors include his wife, Willie May, and children. Funeral services were held at 8 p.m. Thursday (May 4) at the Sparks Funeral Home, 5345 W. Madison St., Chicago; a wake was held from 10 a.m. preceding the funeral. Contributions in Mr. Higgins' memory may be made to Willis French, manager of Janitorial Services, 43 Feldott Rd.



WISCONSIN TEACHERS TOUR

Some 25 high school science teachers from various Wisconsin communities toured Fermilab Saturday (April 22). Their guide, Dr. Robert March, points out beam lines. Dr. March is a Fermilab experimenter and physics professor at the University of Wisconsin-Madison. At his right is Carol Wilkinson, graduate student experimenter, who arranged the tour.

POOL MEMBERSHIPS FOR SALE

1978 Fermilab pool memberships are on sale! Advance sales began Wednesday for the ninth annual swimming season opening Saturday, May 27, at 9 a.m. Employees, experimenters, and their families plus employees of DOE, Advance Security and Mutual Maintenance are eligible.

Memberships are available from the Personnel Department receptionist, CL-6E. Sale hours are 8:30 to 11:30 a.m. and 1 to 4:30 p.m. Fees are: Individual--\$15.00; married couple--\$25.00; and family--\$35.00. Checks should be made payable to Fermilab. Visitors' daily admission charge will be \$1.50 per person.

Pool hours will be: <u>Weekdays</u>--6 a.m. to 8 a.m. (adults only, no lifeguard) and 11 a.m. to 9 p.m. (family swim, lifeguard); <u>weekends/holidays</u>--9 a.m. to 9 p.m. (family swim, lifeguard).

Children's swim lessons will again be offered. A 12-hour swim instruction program will be taught by a certified water safety instructor at the Fermilab pool. Beginning and intermediate classes will be offered. Two four-week sessions will open in June. Fee will be \$15 per child for each session. Registration will begin May 27 at the pool.