

The Village Enterprise



fermi national accelerator laboratory

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ACCELERATOR PIONEER VISITS FERMILAB

Ernest T.S. Walton, 1951 Nobel laureate, visited Fermilab last week. The Irish physicist is spending six months in the United States as a guest of North Texas State University. It was his first visit to Fermilab where the modern version of the "Cockcroft-Walton" provides the source of particles for the Fermilab accelerator system. It was the first such machine developed by Walton and John Cockcroft in the early 1930's that became the world's first particle accelerator.

At a colloquium for his Fermilab colleagues, Dr. Walton described the one hundred years of the Cavendish Laboratory at Cambridge that began under the 7th Duke of Devonshire in 1870 and has been marked by the presence of some of the greatest names in scientific history. At least 22 Cavendish scientists have been awarded Nobel prizes, he pointed out. Among these were James Clerk Maxwell, John W. S. Rayleigh, and J. J. Thompson.

Dr. Walton recalled the era of the direction of Cavendish by Lord Ernest Rutherford, particularly the seven years before 1934 when "Rutherford was at his height," according to Dr. Walton. It was Lord Rutherford's research in the early 1900's that revealed the nucleus of the atom.

"Rutherford was a man of great scientific caution," Walton recalled. "He had a great love of alpha particles. He seemed to think he had some special rights to them. It was true that they all came out at the same energy and could be counted by simple methods. I think Rutherford's character was somewhat the same as the alpha particle which always goes straight, bulldozing through matter. And so did Rutherford bulldoze through an experiment to the objective."

"Rutherford was very impatient if new results were coming; he couldn't wait," according to Dr. Walton. "He carried short blunt pencils which he frequently used to mark up



...Ernest T.S. Walton...



...Inventors of one of the first accelerators, Dr. Ernest T.S. Walton (L), and Dr. John D. Cockcroft (R), with Lord Rutherford, at Cambridge University in the early 1930's...



...Rutherford's laboratory at Cambridge University in the 1930's...

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VISITS FERMILAB (Continued)

preliminary data so badly that it was ruined. As a result, his underlings developed all sorts of subterfuges to keep information from him until it was ready."

Walton said that Rutherford insisted that young students get into research that was of special interest to them. It was Rutherford's encouragement that led Walton to seek a way to produce particles for research. John Cockcroft joined the project that led to the development of the important source of ionized particles.

Dr. Walton toured the Fermilab facilities as the guest of Fermilab physicist Don Edwards. Stopping in the gallery of Fermilab's pre-accelerator for a photograph, he was asked to give his impression of Fermilab's addition to high energy physics facilities:

"I find it very interesting. In my mind I compare it with the early accelerator which we created at the Cavendish Laboratory. You have an impressive professionally-made machine. Ours was a crude home-made bit of equipment which we somehow managed to keep running long enough and sufficiently well to do our experiments."

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"WE CARE" SICK LEAVE PROGRAM REVIEWED

Fermilab pays the full cost of the sick leave program for its employees. The program is a form of insurance to protect employees from financial hardship should they be struck with an extended period of serious illness.

"Sick leave" is not intended to be paid time off work for any reason other than illness. Regular attendance is expected as part of continued employment at Fermilab. Employees who are unfortunate enough to be ill for a long time are protected by the sick leave plan until long term disability insurance (another benefit program) takes effect.

Then too, an employee who uses sick leave time indiscriminately risks the tragedy of being caught with no sick leave time in reserve should a serious illness strike.

Letters reminding them of these facts and of the need for regular attendance have been sent to employees whose attendance records show three or more days of sick leave or short term absences in the last quarter of FY 75 and the first quarter of FY 76.

Any employee with a continuing health problem that causes irregular attendance is encouraged to visit the Medical Office, CL-1W, for help and an evaluation of the problem. Sick leave records will be reviewed quarterly. For further information contact your supervisor.



...(L-R) Lee Teng, Dr. Walton, Don Edwards following Walton's colloquium at Fermilab...

NALREC DINNER-THEATER PARTY Sunday, November 23 Pheasant Run - St. Charles

Dinner: 5:30 p.m.
Choice of four menus

Play - 7:30 p.m.
Musical - "Godspell"

This production of "Godspell" is directed by Patrick Henry, well-known for his direction of the Free Street Theater. Many performers are from the suburban area. Tickets available from Denise Tober, Ext. 3934. \$10 per person.

BICENTENNIAL LECTURE SERIES

"Photography from Manned Spacecraft"

Richard W. Underwood, Technical Assistant to the
Chief of the Photographic Technology Division
National Aeronautics and Space Administration

Friday, December 5, 1975 - 8:30 p.m.

Fermilab Auditorium

No admission charge - Tickets available from Denise Augustine - CL-12E

FINKS SHIFTS TO DOUBLER POST

Jim Finks, who has been the Business Manager of the Business Services Department, has recently been transferred to the Superconductor Group as Assistant Head, effective November 10, 1975. At the present time, all immediate functions of the Business Services Department will be coordinated by Donald Beatty, as Acting Business Manager.

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FERMILAB STUDENTS, NOTE:

A change in the tuition advance procedure for classwork being reimbursed by the Laboratory has been made, as follows: One check for tuition and fees will be made out to the individual and THE INSTITUTION. A second check for books will be made out to the individual student. Therefore, when a tuition advance is requested, two separate amounts must be listed. Such requests take approximately five days to process; so plan ahead in order to have the funds available when they are needed. For further information call Ruth Thorson, Ext. 3324.

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EXTENSION COLLEGE OF COLLEGE OF DUPAGE AT FERMILAB

Six courses will be offered at Fermilab in the quarter beginning January, 1976, by the Extension College of the College of DuPage. Employees, visiting experimenters, and members of their families over 18 years of age are all eligible to take these courses. Registration forms are available from Vivian Butler, CL-6E. Payment is due with registration. Descriptions of the courses, the times, days, and the costs are listed on a sheet distributed with this issue of The Village Crier.

The courses are: Air Conditioning and Refrigeration 102 (Basic Refrigeration) - (eligible for tuition reimbursement); Art 241 - Ceramics: Pottery; Canoe Building at Home; French 061 - Conversational French; Physical Education 151L - Fitness Class; Spanish 061 - Conversational Spanish.

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FERMILAB MEMBERSHIP IN AURORA TENNIS CLUB, LTD.

Fermilab has secured a corporate membership in the Aurora Tennis Club, Ltd. which enables all Fermilab employees, visiting experimenters and janitorial and security personnel to use the six indoor tennis courts at the club as a Laboratory recreation privilege. Players must pay court fees each time they use the tennis courts.

Several extras are available at the Aurora Tennis Club such as a nursery room during morning and afternoon hours, a permanent time for playing option, tennis lessons, and a lounge for before and after play. The winter season continues until May 23, 1976. Further information is given on the sheet distributed with this issue of The Village Crier or from Jane Theis, Ext. 3560.

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FTS TELEPHONE SYSTEM CHANGE

FTS telephone system will change to a 7-digit dialing system at midnight, November 30, 1975. On-net FTS calls will be placed by dialing seven digits. An area code is no longer required. Many of the network numbers will be changing; in most cases only the first three digits of the new number will be different. But for some users the change will be more extensive. Before dialing, check the 1976 FTS Telephone Users Guide. If you did not receive an FTS directory at the recent informational meetings, call the Mail Room, Ext. 3210.

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THANKSGIVING WEEKEND HOURS AT FERMILAB

Food services will be closed on Thanksgiving Day, November 27. On Friday, November 28, breakfast will be served from 8:30 a.m. to 10:00 a.m., a limited lunch service from 11:30 a.m. to 1:30 p.m., no supper service. On Saturday and Sunday, November 29 and 30, there will be regular weekend service -- breakfast, 8:00-10:30 a.m.; lunch, 11:30-1:30 p.m.; supper, 5:00-8:00 p.m.

The Central Laboratory will be open to visitors from 8:00 a.m. to 8:00 p.m. on Thanksgiving Day, Friday, Saturday and Sunday. A receptionist will be on duty from 10:00 a.m. to 5:00 p.m. on Friday and Sunday and from 1:00 to 5:00 p.m. on Saturday.

The Users Center will be closed on Thursday and Friday, November 27 and 28.

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REMINDER: Payroll deduction pledge forms for contributions to charities are due tomorrow, Friday, November 21, 1975.....GIVE A LITTLE.

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FISH AND CHIPS AND JAZZ - at the Users Center, Friday, November 21. Buffet dinner from 5:00 to 6:30 p.m. will cost \$2.25. Jelly's Jazz Band will start at 7:00 p.m. Everyone welcome.

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ARGONNE'S SKI CLUB is again inviting Fermilab people to join the Club's ski trips for the coming season. Trips planned are: Aspen, Colorado, February 14-21, 1976; Salt Lake City, Utah, February 21-28; Aspen-Salt Lake City, February 14-28. Several cost options are available. Call Frank Tebo, Ext. 76-4389.

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IN THE AREA...The Downers Grove Oratorio Society will present "Israel in Egypt" Sunday, December 7 at 3:30 p.m. in Downers Grove North High School. Admission is \$2.50 for adults; \$1.25 for children. Get tickets from Jan Ryk, Ext. 4130.

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LOST AND FOUND items from the Fermilab site are kept in the Travel Office, CL-1W. Clothing items are kept for 30 days, then laundered and given to the Salvation Army. Valuables are kept for 90 days. Check soon for lost items that might have been left at the swimming pool or tennis courts.

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...HAPPY HOUR - Thursday, Nov. 20, 5-7 p.m. - Village Barn - pizza and snacks.

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CLASSIFIED ADS

FOR SALE - 4 new raised white letter Dayton Sport 70's, G70-15, on new American mags, fits Chrysler or Ford. Frank Jasek, Ext. 3719 or M08-9513.

FOUND - Eyeglasses, gold rims & made in France, were found in Fermilab Village near Users Center. Please contact Users Office, CL-1E, Ext. 3136.

FOR SALE - Snow plow blade, hydraulics & frame for jeep type vehicle, est. new \$1000. Asking \$300.00 James Thompson, Ext. 4188.