

The Village Courier



national accelerator laboratory

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FERMI TRADITION LIVES ON AT NAL

The addition of the name of Fermi to the title of the National Accelerator Laboratory, at the dedication ceremony to be held at the Laboratory on May 11, brings to the Laboratory a legacy of great, pioneering discovery in nuclear physics by a man whose warmth and patience are treasured by those who knew him.

Many people associated with the National Accelerator Laboratory once worked with Enrico Fermi. They speak of the new insights he brought to nuclear theories and experiments, but they speak of Fermi the man -- a teacher with a clear, kindly regard for the level of understanding needed by his students. In the fifteen years he resided in the U.S., Fermi made enormous intellectual contributions to American culture in his work at Columbia University, at the University of Chicago, in the Los Alamos project. The importance of his contributions to nuclear advances in the U.S. and to neutrino research now entering a new phase at the National Accelerator Laboratory, is unfolding in the 1970's.

Mrs. Laura Fermi, writing of her life with the great scientist in her book, "Atoms in the Family," gives a delightful narrative of the family's move to the United States in 1939. It is a story not only of their personal adjustment to a new land, but a moving account of the pressures of the time which necessitated their decision to leave Italy for the U.S. where Fermi's work could continue.

Some of NAL's people were Fermi's colleagues, some were his undergraduate or graduate students, others worked with him in technical capacities. This is how they remember Enrico Fermi:

PROFESSOR HERBERT L. ANDERSON of the University of Chicago, now working on Muon 98 at NAL, met Fermi at Columbia University shortly after Fermi arrived in the U.S. Their association continued until Fermi's death in 1954. Anderson tells of Niels Bohr's visit to Columbia in early 1939 to talk to Fermi about the discovery of fission, the splitting of the atomic nucleus. Fermi was greatly taken with Bohr's news and when he left, that very day Fermi and Anderson set up simple experimental equipment that demonstrated the process. They joined a group at Princeton two years later for more advanced experiments on this chain reaction. Such a collaboration between universities, now a common practice at NAL in 1974, was a novel idea in 1941, according to Anderson. One of the collaborators was Robert R. Wilson, then an assistant professor at Princeton.

Anderson recalls that Fermi, the theorist, shifted easily to Fermi the experimentalist. "He delighted in producing with his own hands some piece of apparatus that was needed in the experiment. When the cyclotron at Chicago was ready to run, Fermi made a target that could be manipulated from the outside. We called it the 'Fermi trolley.' It used the field in the



...Laura Fermi, Herbert Anderson on a visit to the National Accelerator Laboratory...



...Enrico Fermi...

magnet to move it about. He loved to be given a problem and took pride in coming up with speedy solutions...Fermi liked to do his homework. He worked out the theory of pion production so that we would know what to expect when we began to operate the cyclotron.

"If he could have seen with what excitement and anticipation such great discoveries are being sought these days at NAL, Fermi would have been thrilled. I wish he could have been here."

ROBERT BACHER, president of the Universities Research Association, met Fermi in 1933 and 1936 at summer lectures for which Fermi travelled to the U.S. from Italy. (Bacher will be chairman of the May 11 dedication program.) In addition to his great intellectual strength, Fermi had enormous physical strength, Mr. Bacher recalls. "I remember catching up with him as he started to swim across a lake at Ann Arbor, to tell him that it was 1½ miles across that lake, but Fermi kept on swimming and went the whole distance. He was a great competitor and loved to win."



...Asa Newman...

ROBERT R. WILSON, Director of NAL, began his association with Fermi in 1941 in that collaboration at Princeton. Dr. Wilson speaks of the clarity of the Fermi lectures he heard during the ensuing years. "They were always informative, instructive, simple and clear enough for everyone to understand...Fermi was a friend, a colleague, a teacher, and an inspiration."

T.D. LEE, Nobel laureate and now Enrico Fermi Professor at Columbia University, was a member of NAL's Program Advisory Committee for several years. Dr. Lee earned his doctorate at the University of Chicago under Fermi. Dr. Lee sees a continuation of Fermi's work at the National Accelerator Laboratory. "He was devoted to the exploration of Nature. Fermi was at the foremost frontier of neutrino experiments, and it is therefore befitting that the Laboratory be named after him."

The cyclotron which began to operate at the University of Chicago in 1951 was then the world's largest. Fermi guided construction of the great technical feat. Important studies in the field of resonances emerged in the strong intellectual climate at Chicago.

ASA NEWMAN, now on the staff of the NAL 15 Ft. Bubble Chamber, was an operator of the cyclotron with Mr. Fermi. "I was always amazed at his ability to talk to everyone. He would explain a problem to me in the way I needed it, then to a student on his level, and then to another physicist. He was able to communicate with all of us and would never walk away until we understood it."

The recent development in neutrino theory at NAL, which opens the possibility of a link with the patterns of electricity, sets the keynote here for the penetrating insights in research to be carried on under Fermi's name at the world's largest atomic research facility.

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SIGN UP NOW

The NALREC 1974 Arts and Craft Show will be held in The Atrium May 20-24. All types of entries are welcome -- art, hobbies, sculpture, crafts. Call Denise Augustine, Ext. 3048 to make arrangements for your display.

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A REMINDER...

Calls from the Laboratory to Chicago area phone numbers should be placed by first dialing access code "77". In reviewing the Laboratory's phone bills, Carolyn Hines reports that many Chicago calls are being placed over the dial "9" access code. Using dial "9" for Chicago area phone calls is costly to the Laboratory. If you encounter any problems in using Dial "77", call Carolyn Hines, Ext. 3788.

CHICAGO CALLS - - - DIAL "77"

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IN THE FERMI TRADITION...

...The collaboration of scientists found in Experiment #98 in the NAL Muon Area brings the Fermi tradition close to the Laboratory. The experimenters come from the University of Chicago (several were Fermi associates), Harvard University, Oxford University, and the University of Illinois. Before their experiment began to collect data, they posed under the magnet of the cyclotron built at the University of Chicago under Fermi's direction and moved to NAL in 1972...



...They are (L-R) front: L. Mo (Univ. of Chicago), S. Pordes (Harvard), H. Anderson (Chicago) R. Wilson (Harvard), I. Kirkbride (Oxford), W. Francis (Illinois). Second row: D. Shambroom (Harvard), T. Kirk (Illinois), R. Heisterberg (Chicago), R. Fine (Chicago), C. Wright (Chicago), F. Pipkin (Harvard), V. Bharadwaj (Oxford), H. Matis (Chicago), A. Skuja (Oxford), L. Verhey (Harvard). Back row: L. Myriantopoulos (Chicago), A. Loomis (Harvard). Missing from photo: W. Williams, N. Booth, T. Quirk (all of Oxford).

NAL DEDICATION DANCE CONCERT TICKETS AVAILABLE

Tickets are still available for the NAL Dedication Dance Concert on Friday, May 10, at 8:30 p.m. The usual \$3.00 price for the tickets, a part of the Art Series planned by the Auditorium Committee, is being underwritten by Universities Research Association, Inc., in honor of the dedication. The complimentary tickets may be secured by calling Marilyn Paul, Ext. 3211.

The program will feature the Richard Arve trio and a group including members of the Chicago Ballet Company. Richard Arve has been a soloist with the Ruth Page International Ballet, Chicago, and other prominent dance companies in the U.S. He has been awarded numerous choreographic grants from the National Endowment in Washington, D.C., and the Illinois Arts Council. He has recently choreographed a new ballet, "Collage," for the Chicago Ballet. The Richard Arve Dance Trio performs in concerts, clubs, and colleges in the U.S. and includes Arve, Mimi Rozak, and Violetta Karosas.

Also on the program are Dolores Lipinski of the Chicago Ballet and Orrin Kayan. The evening will include numbers in traditional ballet style as well as modern, character, and jazz dance.



EMPLOYEE LECTURE SERIES

"The NAL Accelerator -- How it Works

Friday, May 3, 1974

11:00 a.m.

NAL Auditorium

Dr. B. Cox, Proton Department

"Proton Experimental Area"

BLOOD BANK AT NAL JUNE 7

The Aurora Area Mobile Blood Unit will be at the NAL Village Barn on Friday, June 7, to accept blood donations from NAL employees and other interested persons on site. About 200 donations from employees are necessary for all NAL employees to continue to be covered for another year. Appointments are necessary in order to plan an efficient schedule for the appointed day. Call the Medical Office, Ext. 3232 for your appointment, SOON.

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!!! REMEMBER, CREDIT COSTS LESS AT YOUR CREDIT UNION !!!

CLASSIFIED ADS

- FOR SALE - 1973 VW Superbeagle, excel. mil., excel. cond., \$2600. Call Tom Golaszewski, Ext. 3677.
- FOR SALE - 1972 Chevrolet Blazer, loaded, \$3200. Call LaDaune, Ext. 3555.
- FOR SALE - 1967 Mustang-289 V8 stick, good condition, good tires, \$750. See at the Safety Office or call Bob Adams, Ext. 3580.
- APARTMENT TO SUBLEASE - A two bedroom w/refrigerator, range, AC, garbage disposal, w-w carpeting, laundry fac., North Aurora. Available 6/1/74 - \$180 mo. Call Bob Evans, Ext. 3332.
- FOR SALE - 69 Ford/Torino, 2-door, stick, new tires/battery, gd. mil., \$600. Call Paul, Ext. 3604.
- FOR SALE - Outdoor grill w/rotisserie & cover, \$8; an elec. fondue (never used), \$25; a bedroom rug (grey background), \$10. Call Ginny, Ext. 3093.
- FOR SALE - Minolta AL-F 35MM camera w/case, flash cube gun, skylight filter. Excellent condition. \$50. Call Gerry Tool, Ext. 3230 or 896-6518.
- FOR SALE - Yamaha 69 - 305CC street machine, runs well. Call Wally, Ext. 3673 or 393-1837.
- FOR SALE - Two Goodyear studded polyglas snow tires-F78-14, used one winter, \$60. Call Bob Peters, Ext. 3724 or 584-0403.
- FOR SALE - 1970 Sears VIII tent trailer, sleeps 6 w/2 storage benches, full size formica dng. tab., + attach. 8 x 10 add-a-rm, spare & 2 new tires, \$750. Call Joe Volant, Ext. 3094.
- FOR RENT - By wk. or mo., 2 bedrm., A/C house on water front, best fishing, Pine Island, Florida near Ft. Meyers. Call Art Streccius, Ext. 3580 or 392-4905.
- GARAGE SALE - May 3 & 4, 729 Blaine St., West side of Batavia. Children clothes & toys, ladies formals, hsehold. items, all in gd. cond. Tom Larson.
- FOR SALE - '65 Beater VW, gd. engine/tires/radio, body hurting, \$225. Call Mike May, Ext. 3735
- FOR SALE - 73 Mercury Comet GT, auto., 302-V8, bucket seats, \$2250. Call George Elias, Ext. 3575.
- WANTED - Wheelchair, crutches, lge. supply of Geritol & lots of sympathy for Larry Grumboski-Radiation Physics. He'll turn 30 on May 14. Address well wishes to Ext. 3458.
- FOR SALE - Lowery Organ, Lincolnwood 25, \$900. Call Jim Harder, Ext. 3330 or 1-815-727-1649.

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